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MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE
OF
GREAT BRITAIN AND IRELAND.

XXXIX.

1939.

Nos. 1—201.

WITH PLATES A—M.

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TWO PAINTED SKULLS FROM ARNHEM LAND

1. PAINTED WITH MINTJI OF BIRKILLI BARPURO.

2. PAINTED WITH MINTJI OF MANDJIKAI BARPURO.

MAN

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TWO PAINTED SKULLS FROM ARNHEM LAND, WITH NOTES ON THE TOTEMIC SIGNIFICANCE OF THE DESIGNS.¹ *By Donald F. Thomson.*

1 The two painted skulls shown in Plate A were obtained in North-eastern Arnhem Land in the Northern Territory of Australia. The practice of painting the bodies of the dead, and at a later stage, before final disposal, the skulls, with elaborate and often beautifully executed conventionalized designs, occurs generally among the groups in Eastern Arnhem Land occupying the territory bounded by Cape Stewart on the Arafura Sea and Blue Mud Bay on the Gulf of Carpentaria. In this region it is closely bound up both with the funeral customs and with the totemic beliefs of the people. The designs, though painstakingly, even laboriously, carried out, are executed in pigments mixed only with water; the bodies are subsequently exposed on platforms, or are buried; and the skulls themselves are pulverized with pounding stones for final disposal, and therefore leave no record that might provide a key to later investigation. Furthermore, the people among whom these practices occur are rapidly dying out, or are losing their culture. The transient nature of the material makes it imperative therefore that the fullest possible account of the funeral practices of these people should be placed on record.

Apart from the use of definite designs, white clay and red ochre are much used in Arnhem Land. The right to use these pigments, which are merely rubbed on the body on the appropriate occasions, is not restricted to any group but is common to members of both moieties, and generally indicates that the individual stands in a peculiar relation to the society.

But in addition a great number of painted designs, called *mintji* (marks), are employed on ceremonial occasions. In each group there is an appropriate type of *mintji* for the painting of the bodies during a *ngarra* or *mardai'in* (totemic) ceremony, at initiation, for painting the bodies of newly-deceased members of a group, and at a later stage, the skulls. These same designs are painted on the *ranga*—the 'big name,' *yarko yindi*, for the *mardai'in* itself—as well as on the bodies of very old grey-bearded men, *bulumbulmirri* (literally 'with grey beards'), and, again, upon a man some time after the conclusion of the final ceremony at which he attains the status of full initiation to the totemic group.

These patterns, however, are not in general use; each is the property of a clan, or, more correctly, of a *barpuro*—the group which extends beyond the clan and includes all those claiming a common bond of relationship with the *wangarr*, the totemic ancestor who acted as its founder. In its simplest and typical form, in which these groups share some or all of their totems, the *barpuro* is not difficult to define; but in some cases the bond between the component clans of the *barpuro* hangs on so slender a thread that it can be understood only by close study of mythology—which here, as always, supplies the key—furnishes the charter—for the present-day state of affairs. The *barpuro* is the most important grouping in Arnhem Land; it is also the most difficult to

¹ The expeditions in Arnhem Land during 1935-37 on which the work presented in this paper was carried out were undertaken under Commission from the Commonwealth Government and as Research Fellow of the University of Melbourne.

understand, although such an understanding is essential to the interpretation of the social and ceremonial life.

Each *barpuro* has its own specific *mintji*, which are regarded as its exclusive property, and as a part of the heritage that it derived from the *wangarr*, the founders of the *barpuro*, themselves. The right to use any *mintji* is vested in the members of the *barpuro* and is guarded with the greatest jealousy. Any infringement would be regarded in these groups (and avenged) in the same way as an act of violence against one of its members, and I have actual instances in which *miringo* or avenging expeditions have been organized following such an infringement. For not only are these *mintji* derived from the *wangarr* of the *barpuro*, but they are bound up with its totemic life—synonymous in this case with its spiritual and social existence—so that the use of these things by others does, in fact, involve a blow against the solidarity of the group and demands to be avenged as such.

The sacredness of the *mardain mintji*, and its importance in social life, will be still more readily appreciated by reference to the mythology; for it is based upon the belief held by these people that the *mintji* were actually present on the bodies of the totemic ancestors when they sank down—'went inside'—at the sacred places marked today by *kapu manotji* water-holes. These sacred wells are the places to which the totemic objects, *ranga*, used in the *mardai'in* ceremony are returned at the conclusion of the ceremony, and the place from which emerge the *malli* of babies when they enter their mothers at conception. Native opinion varies on the question of whether the culture-hero acquired the *mintji* by painting his own body during the ceremonial life that he initiated, or whether it represents the marks made by the flood waters of mythical times when he sank down. But whatever differences of opinion there may be in matters of detail, all share in the fundamental belief that the *mintji* are derived directly from the totemic ancestor, and that the designs used to-day are the *malli*, the shade, of the *mintji* that exist on the *wangarr likan*². That is why the most sacred *mintji* in each group, the most carefully executed, the *mintji* that may make a man sick (*rereri*

gurrupan marryu—'make sick by marr' (mana)—if he gazes too long upon it) is called *likan*—for *likan* is the 'big name' for the *wangarr ngarraka*—in literal translation, 'the bones of the totemic ancestor.' This makes clear the significance of the use of *likanboi mintji* in a series of rites to all of which the term *kopa ngamma-tamma* is applied. All constitute a *rite of aggregation*, the affirmation of the bond between the members of the group and the *malli wangarr*.

In each group the design itself is regarded as fixed, and must follow a set, traditional form, which varies only slightly by reason of the skill of execution of the individual, rather than by deliberate intent. Each design has two forms which are distinguished by separate names—based chiefly upon the technique with which they are carried out:—

(1) *bulgo*, or *larr*—'wide, open'—on account of the relatively coarse, open texture of the pattern and especially of the lines and cross-hatching. A rough, coarse brush, made by fraying the end of a stick with the teeth, is employed. This *mintji* is used for painting the body at the final stage of the *ngarra* or *mardai'in* ceremonies, when a ceremonial washing of all participants, including the women and children in the camp, takes place. This is the only totemic *mintji* that may be painted on the bodies of women and children.

(2) *likan*, or *likanboi* (see footnote²). Although there is often very little difference in the actual design itself, the technique is very different. It, again, is characterized by the technique with which it is carried out—with a fine brush made generally from human hair—and it may not be seen by uninitiated persons.

THE PLACE OF *Mintji* IN FUNERAL RITUAL

Reference has been made above to the use of sacred *mintji* for painting the bodies of the dead, and also for painting the skulls of the dead before final disposal. It will now be evident that this painting of the skull is more than a mere decoration, it is benediction, a consecration, a *rite of aggregation*.

Again, when a man or woman dies the body is removed to a place apart, a little distance outside the camp, and there it is painted with the *likanboi mintji* of his or her own *barpuro*, preferably of the totem associated with the actual waterhole from which the *malli* emerged

² *Likan* is the big name, the secret or 'inside' name, used only by members of *yiritja* moiety; *bundurr* is the equivalent word used by members of *dua* moiety.

to enter the mother. This, again, is one of the sites called *kopa ngammatamma*. In discussion the natives declared "that body belong him got *mintji* and that *malli* got *mintji* too"; i.e., his skin has *mintji* and therefore his ghost will have *mintji* too.

No woman or uninitiated person may look at the body once it has been painted, but it is covered with sheets of tea-tree (*Melaleuca*) bark until it is disposed of, either by exposure on a platform called *djamba*, or buried in a grave, *molo*. After three or four weeks, the body is removed from the platform, or is exhumed, and the bones extracted for ceremonial presentation, at a ceremony called *bukubut*, to the relative, generally a woman, by whom they will be carried until the final disposal, two or three years later.

Birkilli Barpuro AND *Mandjikai Barpuro*.

The two skulls figured in Plate A are painted in the totemic *mintji* of *Birkilli barpuro* and *Mandjikai barpuro*, respectively. Both these groups are of *yiritja* moiety. *Birkilli* is associated with a wild bee or 'sugar bag' called *niwurda*, or *birkurda* ('big name'). *Mandjikai* derives its name from the sand fly.

Birkilli is frequently called *Kopapoingo*, which is, in reality, only the name of the language. The linguistic aspect has, however, no bearing whatever upon the totemic affinities of these groups, and this is well shown by reference to the *Kopapoingo* language. This language is spoken by *Birkilli*, and also by certain of the clans of a group *Daigurgur*, which, though they speak a language identical with that of *Birkilli*, claim affinity with a different *barpuro*. Again, *Koiya-mirrillilli*, the name of another clan-group that speaks the *Kopapoingo* language, claims affinity with *Mandjikai barpuro*—an aggregation of clans with several distinct languages which *Koiya-mirrillilli* people are often unable to understand.

The *mardai'in* (totemic) *mintji* of *Birkilli* is a diamond-shaped pattern called *kulun-gulun* (Plate A, fig. 1) representing, in a highly con-

ventionalized form, the comb of the 'sugar bag' bee, *niwurda*.

The *mintji* on the two skulls in Plate A illustrate the two forms of the *mardai'in mintji*, one of which, derived from each of the two groups under discussion. Although it is customary to paint a skull with *likan mintji* and not with *larr*, the *Birkilli* skull is actually painted in this latter. It is *larr*, or *buyu*, indicated by the relatively coarse execution.

EXPLANATION OF PLATE A.

Fig. 1.—Skull of a man of *Birkilli barpuro* painted in *mintji* known as *kulun-gulun larr*. The first of these words is the name given to the diamond-shaped pattern and the second to the actual technique employed. The cross-hatched areas represent *tjukurr*, 'honey' (literally, 'fat'; *likarri*, the correct word for honey, is rarely heard). The spotted areas represent bee-bread. This skull was carried by the *kallai*—elder brother's wife. The bones are rarely carried by men, for they bring 'bad luck' in hunting.

Fig. 2.—Skull of a man of the *Wallamango* clan, *Mandjikai barpuro*, from the Crocodile Islands. The design on this skull is an example of *likanboi mintji*, the most sacred known to these people, and is carried out by the finest technique, in contrast with the relatively coarse execution of the design in the upper figure. The *mintji* represents the *mintji* of *Tukororo ranga*. The *ranga* itself is painted on the frontal region, but is not seen in the figure. This *wangarr* is believed still to frequent Cadell Straits, Elcho Island, and to be responsible for the tide-rips there. The cross-hatched areas represent running and 'boiling' water, the lines in yellow are those made by the meeting of tidal waters and by the breaking of water on the rocks when carried by *Tukororo*. These patterns are therefore believed by the natives to represent in a highly conventionalized form the story, or an incident in the story, of the life of the totemic ancestor, the *wangarr* itself.

CLAN-MONOPOLY OF PERSONAL NAMES AMONG THE PURUM KUKIS. By Tarak Chandra Das, M.A., Lecturer in Anthropology, Calcutta University.

2 The Purums form a branch of the Tibeto-Burman-speaking 'Old Kuki' group of Assam. According to the last census they number only 305 persons, who live in four small villages near Waikhong in Manipur State. Their villages are Purum Khulen, Purum Chumbang, Purum

Changninglong, and Purum Tampak,¹ henceforth

¹ Tarak Chandra Das—*Kinship and Social Organization of the Purum Kukis of Manipur*. Journal of the Department of Letters, Calcutta University, Vol. XXVIII, 1935. Julhung has proved to be a subclan, as suggested in this paper.

referred to by the second part of their names, e.g., Khulen. They are situated between 93° 55' and 94° 5' East Longitude, and 24° 20' and 24° 30' North Latitude. The Purums practise a form of migratory hill-cultivation, locally known as *jhuming*. In recent years they have also taken to wet-cultivation in the plains. Rice is their staple food, and rice-brew (*zu*) the most important drink. The tribe is primarily divided into five exogamous clans, some of which are again subdivided into a number of subclans. Marriage is regulated on the basis of tri-clan system.¹

Information was collected from three villages namely, Khulen, Chumbang and Changninglong. The fourth village, namely, Tampak, is an offshoot of Khulen, and, according to its own statement, closely follows Khulen in all its social and religious matters. Of the five clans of the Purums, three are represented among my informants directly. As regards the other two, I have no record. But I have reasons to believe that they were included among my informants though they did not play any conspicuous part.

In 1932 Chongshel, the assistant village headman (*Luplākpa*, a term adopted from the Manipuris) of Chumbang, stated that each Purum clan has a monopoly over a number of personal names. Each member of a particular clan is supplied with a name from among them. If a person belonging to one clan takes a name which is the property of another clan, he is fined a pig and a pot of rice-brew (*zu*), but he is allowed to keep the name. He gave us the names monopolized by three important clans. Thus, according to him, the Mākān clan, of which he was a member, has monopoly-right over the following names:— (1) Chongshel, (2) Roupam, (3) Tonsu, (4) Bonghunum, (5) Wāingam, (6) Rimlhun, (7) Bukāng, (8) Lumhungir, (9) Rengāi and (10) Lungkam. The Pārpā clan has the following names:— (1) Tultou, (2) Rimhungir, (3) Rengthou, (4) Ngāirim, (5) Tsungrim, (6) Rulthou, (7) Rengtān, (8) Rengir, (9) Hālweng and (10) Lungka. The Mārrim clan has the following names:— (1) Rimthou, (2) Rimnir, (3) Rimril, (4) Rimhen, (5) Rimhel, (6) Rimhudi, (7) Hulin, (8) Rimlāk, (9) Rimshu, (10) Shāngbi.

In 1936 we proposed to verify Chongshel's account and information was collected from Kongthāng, the *Luplākpa* (assistant village head-

man), and Pānshāng, the *Māipā*² (magician or medicine-man) of Khulen, the oldest and the biggest village of the Purums. We also made inquiries from Chaubā, the *Māipā*, and Sāngkoi, the *Luplākpa*, of Changninglong. On both these occasions our informants were either checked or corroborated by a large number of ordinary villagers, who used to come to us, whenever we went to their villages. Both these sets of informants from Khulen and Changninglong independently corroborated the statements of Chongshel as to the existence of clan-monopoly of personal names among the Purums. When they were asked to recite the different names possessed by the different clans of their respective villages, the Khulen informants failed to give any list. But Chaubā of Changninglong gave us a list of men's names monopolized by the Mārrim clan of his village. This list, however, entirely differs from the one given by Chongshel in 1932. The names given by Chaubā are:—(1) Ringhal, (2) Rimpu, (3) Nāu-āng, (4) Sānthei, (5) Hrungrir, (6) Rimthou, etc.

These assertions of our informants are of considerable theoretical interest in Indian ethnography. Hitherto this culture-trait has not been reported from any other part of India. On the other hand it is referred to as a distinctive feature of the sib-complex of the Eastern area of North America. Prof. Lowie³ refers to it in the following terms "each sib has a set of distinctive personal names for its members" and adds that "while all the Eastern sibshave distinctive sets of personal names, such sets are never found in association with the sibs of the Northern Plains." Writing about the Iroquois, the same author states that "one of the most prominent features of the Iroquois system is the existence of sets of individual names, each sib having its distinctive series." In view of these facts from North America, the occurrence of this trait in the eastern hill of Manipur, another "safety pocket of earlier culture," is of special significance. Under these circumstances, it is desirable that we should verify those assertions of our informants from other sources. This we propose to do by analyzing the different sets of

¹ This is another Manipuri term adopted by the Purums. Pānshāng was *Khullākpa* (village headman) of Khulen in 1932. He resigned the post later on, and set himself up as *Māipā*; and we found him in this capacity in 1936.

² R. H. Lowie—*Primitive Society* (Boni and Liveright, 1925), pp. 123, 125 and 143.

names collected by us in connexion with other topics of tribal study.

We have three sets of names of men, collected in connexion with (1) somatometric measurements (2) village census, and (3) genealogical tables. In addition to these, we have also two sets of names of women gleaned from (1) village census and (2) genealogical tables. These different sets of names include the names of many of the same persons.

Let us first examine the names collected from somatometric measurement sheets. We have here 134 names of men distributed among the five different clans in the following manner:—Mārrim, 18; Mākān, 26; Pārpā, 19; Thāo, 29; Khayāng (sometimes pronounced as Khyeng) 42; Total 134. These are names of persons who have been actually measured as well as of their fathers. The recording was mainly done, in this particular instance, by our interpreter Mr. Kampu, a Kuki young man of about 22 years of age, who passed the Matriculation Examination of the University of Calcutta. He was acquainted with the local method of transcription of tribal words into Roman system. About 17 sheets were, however, filled up by the senior students of Anthropology (1932) of the University of Calcutta, and this is a possible source of confusion. The recording in connexion with genealogical tables and village census was done by us with the help of the interpreter referred to before, and of Nechak, another Kuki interpreter belonging to the State Service of Manipur.

Out of these 134 names, one at least, that of Tombā, occurs in two different clans, namely Pārpā and Khayāng. The names of Chā-thoi of Mārrim clan, and Chāo-thoi of Thāo clan, have great similarity; and we are not sure whether they indicate the same or two different names. This is also the case with Choubā and Obrām of Mārrim clan, and Chāobā and Oprām of Khayang and Mākān clans respectively. Besides these, there is no other actual or doubtful occurrence of the same or similar name in different clans. On the other hand, the same name occurs more than once in the same clan and even in the same village. Coincidence of this nature is found on many occasions in this list. Thus, the name Choubā occurs twice in the Mārrim clan of Tampak; Kānshu occurs four times in the Mākān clan of Khulen; Thingkip thrice in the Thāo clan of Khulen and Tampak; Sanāton twice in the Thāo

clan of Khulen; Abungchāo twice in the Thāo clan of Khulen and Tampak; Mithāng four times in the Khayāng clan of Khulen and Tampak; Munu and Semā twice each in the Khayāng clan of Changninglong and Khulen respectively. Thus, the coincidence of the same name more than once within a particular clan far out-numbers the real or doubtful coincidence of the same name in different clans. The occurrence of a particular name, more than once, in the same clan and in the same village, within two successive generations, points almost unmistakably to the existence of the custom under discussion. Had they not been pressed by some such custom they would not have employed the same name to indicate several persons living at the same time—a possible source of great confusion in identification, the main purpose of naming individuals.

In the list of names of men collected from the village census there are 141 names distributed among the different clans in the following manner:—Mārrim, 23; Mākān, 25; Pārpā, 22; Thāo, 27; Khayāng, 44; Total, 141. The names included in this list were those of adults as well as of infants. Here we find five names, each of which occurs in two or more clans:—Chāu-thoi once in Mārrim and once in Thāo; Sechāo in Mārrim and Pārpā; Wāingam in Mārrim and Mākān; Khoidung in Khayāng and Thāo; Rengshot in Mākān, Khayāng and Thāo. Here also we find a number of names occurring in the same clan for several times. For example, Rimpu occurs twice in the Mārrim clan, Kānshu twice in Mākān clan, Dāmshu, Kongā, and Mairā twice each in Khayāng clan, and Shil-lung twice in Pārpā clan. Thus we have here six coincidences in the same clan and five in different clans.

In the list of names of men collected from genealogical tables (Mārrim, 28; Mākān, 30; Khayāng, 23; Pārpā, 9; Thāo, 10; Total, 100) we do not find any name which occurs in more than one clan, whereas there are seven cases of coincidence in the same clan. Thus, Rimpu occurs twice and Rauthou thrice in the Mārrim clan, Longchungām and Rengāi occur twice each in the Mākān clan, and Thounāng thrice in the same clan; Hālshu, Kongā and Lunghrun twice each in the Khayāng clan.

In the list of names of women gleaned from the village census (Mārrim, 16; Mākān, 13; Khayāng, 20; Pārpā, 15; Thāo, 14; Total, 78) we get 78 names in all. Herein only one name, Toinu,

appears in two different clans, Khayāng and Pārpā, while there is no name which appears more than once in the same clan.

From the genealogical tables we get 101 names of women (Mārim, 21; Mākān, 16; Khayāng, 36; Pārpā, 11; Thāo, 17; Total, 101) of which two appear in different clans; Jungāi in Mārim and Khayāng, and Chaineik in Khayāng and Pārpā. But there are five cases in which the same name occurs more than once in the same clan; in Mārim clan, Dānnu twice; and in Khayāng, Maitoi and Manu twice each; in Pārpā Chaineik twice; in Thāo Luchāo twice. The following table reveals the comparative position of the case at a glance.

Comparative Table showing occurrence of Names in the Same and Different Clans.

| Sources of information. | Number of names | Occurrence of same name in different clans. | Occurrence of same name more than once in same clan. |
|--|-----------------|---|--|
| Measurement sheets. (Names of men only) | 134 | 1 sure case 3 doubtful | 8 sure cases most found in same village. |
| Genealogical Tables. | | | |
| (a) Names of men ... | 100 | nil | 7 sure cases |
| (b) Names of women | 101 | 2 | 5 " " |
| Village Census. | | | |
| (a) Names of men ... | 141 | 5 | 6 sure cases |
| (b) Names of women | 78 | 1 | nil |

The evidence of these lists substantially corroborates the statements of our informants from Chumbang, Khulen, and Changninglong, as to the existence of monopoly of names in each clan. In a community strictly observing clan-monopoly of personal names, we should not find any name in more than one clan. But this is not the case here. We find in the measurement-sheets one sure case of occurrence of the same name in different clans, and three doubtful cases, while in genealogical tables there are two such cases among the females and none among the males. But the list collected from village census shows the greatest number of occurrence of the same name in different clans, being five among men and one among women. This is probably due to two facts, namely, (1) it includes a large number of names of children and infants, some of whom died long ago, and (2) these names were not always recited to us by the master of the house concerned. So it is not

impossible that a few inaccuracies have crept into this list. Where the names were collected directly from the individuals themselves or from the masters of the families concerned, naturally we get a more correct list. This is borne out by the list of names collected from the genealogical tables and from the measurement sheets. In the former, names were given by the master of the family, while in the latter, half the names were given by the individuals themselves and the other half consisted of the names of their fathers. Thus, there was practically no possibility of mistake in them; and this is reflected in the small number of occurrences of the same name in the different clans. In the list prepared from genealogical tables we get no such case among men while in the list prepared from measurement sheets we get one such definite case and three doubtful cases. The doubtful cases are perhaps due to the existence of more than one recorder in this instance, as mentioned before. The names of women collected from genealogies, however, show two such names. In this instance again there is some possibility of mistake. Though the majority of marriages are contracted within the village, yet, owing to patrilocal residence, some of the wives come from different villages and possibly their names could not be so well remembered as those who have grown up within the village from their infancy. This is, perhaps, all that we have got to say against the facts going contrary to the statements of our informants.

Let us now analyze the cases of occurrence of the same name more than once in the same clan, and see how they support the thesis of our informants.

If the number of names monopolized by each clan be not sufficiently large, we may expect to find the same name applied to different persons of the same clan and of the same village, and belonging to the same or successive generations. This is borne out by the evidence of each of our lists of names. In the list prepared from measurement-sheets we have eight such coincidences and in those made for village census and genealogical tables they number seven and twelve respectively.

A high percentage of coincidence of the same name within particular clans, as found in the list of names collected from genealogical tables, may also be attributed to the following name-giving custom practised by the Purums. On the second or third day after birth the *Thempu* (village priest) of the *Māipinu* (the medicine-woman—here the midwife) performs a divinatory test. In one

village, three paddy-grains are dropped in a bowl of water simultaneously by the *Thempu*, who utters at the same time the selected name. If all the three grains sink together, the omen is good and the name stands. If the grains do not sink together, the experiment is repeated twice more with the same name. If the results are the same, a new name is selected and the test applied in the very same manner. This goes on till a name is found out. In another village, the *Māipinu* holds a bow lightly at the middle of its string, and utters the selected name. If the bow moves of itself, the omen is good and the name is kept. If the bow fails to move, another name is uttered and this goes on until a name is found out. Usually the name of the great grandfather is given to a boy, provided it stands the divinatory test. If it fails, then one by one his brother's names are tested. If these prove also unsuitable in the test, the name of a man who belongs to the generation of the great-grandfather and to his clan, is selected and tested in the usual manner. In case of failure here too, they try with the names of the grandfather, his brothers, and clansmen of his generation, one after another. So far as regards naming a male child. For female children, the names of the wives of the afore-mentioned persons, beginning with the great-grandfather and ending with the clansmen of the grandfather, are tested in the usual way, one after another, till one of them successfully passes the divination. If such an exigency arises that all the names fail to pass the divinatory test on a particular day, the ceremony is postponed to a later date when the same experiments are repeated in the very same manner and this goes on until a suitable name is found out on that date, or on any other date later on. The existence of such a custom may ultimately lead to the growth of clan-monopoly of names, provided that either the family expands into a clan, or the clan contracts into a family. Among the Purums, there are indications pointing to the former. But, we are afraid, the Purums do not practise this name-giving custom strictly nowadays. At least, the custom is not corroborated by the internal evidence. Most probably it is a traditional custom which they have recited to us and not actually and seriously practised at present.

In spite of these evidences to the existence of clan-monopoly of names, it seems that, at present, the custom is not practised with stringency. Out

of the four villages of the Purums, three (Chumbang, Khulen, and Changninglong) agreed that this custom existed, but the attitude of the informants from these villages showed that they were not speaking of a living custom which was being observed every day. Chongshel of Chumbang could give only the names of men of three clans, namely, *Mākān* (which is his own clan), *Pārpā* and *Mārrim*. On comparing these names with those collected by us we find that out of the ten names given for *Mākān* clan, six (Chongshel, Tonsu or Tonshu, Wāingam, Bukāng, Lungkam and Rengāi) appear in our lists; out of the ten names of *Pārpā* men, only one (*Rengtān*) is in our lists: while none of his *Mārrim* names is in any of our lists. Thus, it seems that, except the names of his own clan, his knowledge about other clans is very limited. Had these names been in constant use, he would certainly have been able to tell them to us.

This is also the case with the informants from Khulen and Changninglong, Chauba of Changninglong, who was an elderly man of varied experience, could give us only six names of his clan (*Mārrim*), three of which only (*Rimpu*, *Nāu-āng* and *Sānthei*) can be traced in our lists. He could not give the names in other clans. The Khulen informants are still more significant. They could not give any name at all though they agreed to the existence of the custom. But these same informants gave us the names of the inhabitants of their respective villages including those of children and women classified according to clans. Thus, we cannot question their intelligence or memory.

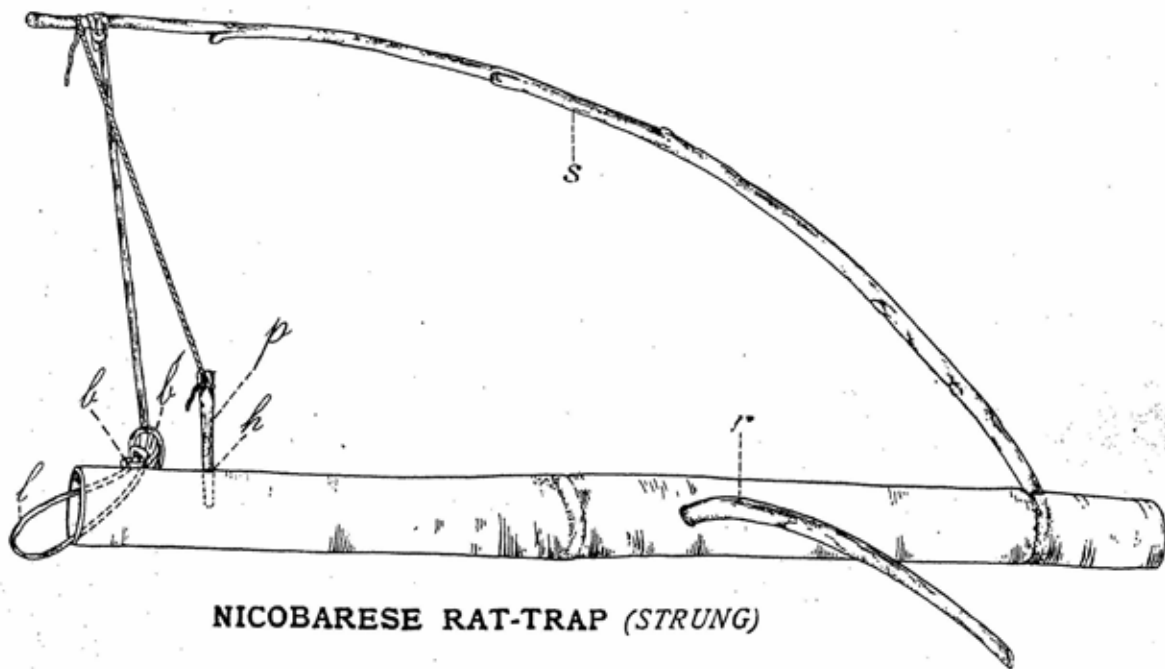
Considering all the evidences relating to clan-monopoly of names, we are of opinion that in the past, each clan possessed a set of names over which it exercised monopoly-right. But in course of time, with the change of ideas, new names were added to the list, and the old names became unpopular and gradually went out of use. Still each clan respected the right of the other clans in respect of new names and this was perhaps possible owing to the very limited nature of the population of the tribe as well as the proximity of the villages in which they live. Beyond these two, we do not find any other mechanism through which the monopoly in new names could be maintained. If the Purum clans have grown out of families, of which there is considerable possibility, such a monopoly of names does not appear at all unusual or impossible.

A NICOBARESE RAT-TRAP. By R. R. Mookerji, M.Sc., Anthropological Laboratory, Indian Museum, Calcutta. Published with the permission of the Director, Zoological Survey of India, Calcutta. Illustrated.

3 The rat-trap of the Nicobarese described below was collected by Mr. E. Hart from Car Nicobar and presented to the Indian Museum, Calcutta, in the year 1921. The trap is exhibited in the Ethnographical Gallery of the Museum (Regd. No. 11302).

The trap consists of a piece of bamboo 86 cm. long with a diameter of about 7 cm. The bamboo piece consists of two nodes with the

holes, and then passed out through the second hole and tied in the form of a loose double knot, while the other end of the long slip is attached to the free end of the spring-rod (*s*). A narrow wooden plug 9 cm. in length is tied by a piece of strong cotton twine, about 24 cm. long, to the upper free end of the spring-rod; this is fixed in a hole (*h*) situated at a distance of 9 cm. from the mouth, when the trap is set. Another curved



NICOBARESE RAT-TRAP (STRUNG)

FIG. 1. A NICOBARESE RAT-TRAP.

b, b', holes for passing the cane slip; *h*, hole for fixing the plug; *l*, look (drawn out); *p*, plug; *r*, supporting rod; *s*, spring-rod.

internodal partition at a distance of 34 cm. from the open end which forms the mouth of the trap. The spring-rod (*s* in Fig. 1) is formed of a somewhat pliant young branch of a tree, some 90 cm. in length, and is fixed into the tube, in a hole drilled at a distance of 76 cm. from the open mouth of the bamboo, at an angle of 45°. At a distance of 3 cm. from the mouth of the trap and on the same plane on which the spring-rod is fixed, there are two small holes (*b, b'*) drilled side by side at a distance of 1 cm. from each other. One end of a long thin slip of cane is at first pulled inside the bamboo tube through one of the

piece of wood (*r*) over 1 foot in length is attached to the bamboo trap, about the middle, in such a position that its longer free end comes in contact with the ground when the trap is set, and does not allow of its being overturned. It is doubtful whether the use of a curved piece for this supporting rod is accidental in this particular specimen, but a curved piece such as has been used in the specimen under description, would certainly prove more efficient for securing the trap to the ground.

The working of the trap is quite simple. It is a self-acting trap and for setting it the plug

(p) is fixed loosely into the hole (h) in such a way that a portion of its lower end, about 1 cm. long, remains projected inside the hollow of the bamboo tube. On fixing the plug, the spring-rod is bent over the bamboo in the form of a bow, and consequently the cane slip attached to its upper end becomes quite loose. The loose cane slip is drawn into the hollow of the bamboo tube through the hole (h) and formed into a loop along the inner surface of the bamboo tube. Some food is placed inside the tube below the projecting end of the plug. The rat, entering through the opening, passes through the loop (l) and, while it attempts to reach the food, its body comes into contact with the projecting end of the plug (p), which flies up on the slightest touch. As the distance between the plug and the loop is only 6 cm., the major portion of the body of the rat remains within the loop. The plug being thus released, the spring-rod goes up with considerable force and the rat is caught inside the loop which is greatly shortened by the action of the spring-rod.

It should be pointed out that neither Man¹ nor Whitehead² mentions the use of rat-traps by the Nicobarese. Man³ in his exhaustive list of Nicobarese objects also does not mention any rat-trap, though traps for other creatures such as fish and bird are included in the list. In a place like the Nicobar Islands where enormous damage is done by rats, it is but natural to expect some indigenous means to be adopted for the control

¹ Man, E. H., *The Nicobar Islands and their People*, Guildford.

² Whitehead, G., *In the Nicobar Islands*, London, 1924.

³ Man, E. H., Descriptive Catalogue of objects made and used by the Natives of the Nicobar Islands, *Indian Antiquary*, XXIV, 1895.

of these pests. Man, however, mentions in *The Nicobar Islands and their People* that "a board" is placed some short distance below the floor of the house and attached to each post. This is a sort of a barrier used, and a quite effective one, to prevent rats and mice from getting into the house and into the thatch." Whitehead⁴ and Hutton⁵ also refer to this board, but no other rat-traps are described.

A rat-trap similar to the one described above has been reported also from Sumatra. From its description given by Fischer⁶ it is certain that this trap, though it differs in some respects from the Nicobarese trap, is essentially similar. Hutton has pointed out cultural affinities between Assam, Malay Peninsula, and the neighbouring islands; and the occurrence of similar rat-traps in Sumatra and Nicobar Islands may be an instance of the same. Hiroa⁷ in his monograph on *Samoan Material Culture* has published a photograph of the Samoan rat-trap (*mailei'iole*) and has mentioned that a similar type of trap is also found in New Zealand and Cook Islands (*l.c.* p. 576). From the photograph of the Samoan specimen it is clear that the trap undoubtedly belongs to the same type that we find in the Nicobar Islands and Sumatra.

My thanks are due to Dr. B. S. Guha, Anthropologist, Zoological Survey of India, for kindly going through my manuscript.

⁴ Whitehead, G., *In the Nicobar Islands*, London, 1924, p. 60.

⁵ Hutton, J. H., *Notes on the Andamanese and Nicobarese*, Man-in-India, Ranchi, XI, 1931, p. 6.

⁶ Fischer, H. W., *Katalog des Ethnographischen Reichs Museum*, XII; *Süd-Sumatra*, Leiden, 1918, p. 110.

⁷ Hiroa, T. R., *Samoan Material Culture*, Bernice P. Bishop Museum Bulletin, 75, 1930, p. 694, pl. XLVIII.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Huxley Memorial Lecture: 29 November, 1938.

4 This Lecture was delivered by M. Marcel Mauss, Professor at the Collège de France, and President of the École des Hautes Etudes in Paris, under the title *L'Histoire d'une Catégorie de l'Esprit humain: la Notion 'Personne', celle de 'Moi'*. The full text will appear in *J.R.A.I.*, LXVIII, 1938, and may be obtained separately from the office of the Royal Anthropological Institute, price 2s.

The distinguished lecturer was entertained at dinner by the Council and Fellows of the Institute, and after the delivery of the Lecture, the President of the Institute, Mr. H. J. Braunholtz, presented to Professor Mauss the Huxley Memorial Medal, and a

cordial vote of thanks was proposed by Professor A. Radcliffe Brown and seconded by Dr. C. G. Seligman, F.R.S.

In accordance with the method long adopted by the 'École Française de Sociologie', and exemplified by the work of Hubert, Czarnowski, Durkheim, Lévy-Bruhl, and the lecturer, on the social history of the categories (in the Aristotelian sense) of human experience, M. Mauss asked the question, what people mean when they speak of "I" or "me", using distinct words to express different aspects of that notion. Among the Zuni, the clan consists of a certain number of 'personages', rather than 'persons'; each defined by specific participation in

social events, under names and with functions which constitute the social order, and are believed to maintain it. Kwakiutl society is perpetuated similarly in all its forms and functions by the transmission of individual names and other insignia in 'an immense masquerade', the extreme example of a system of belief widespread among North American peoples. In Australia masquerade is replaced by ceremonial painting, but the function of the ritual is the same—to perpetuate a system of associated personalities. In the light of these examples, the Indian and the Chinese conceptions of personality illustrate alternative and divergent trains of thought; 'individuation by form' and 'by matter', the latter linking Chinese ritual and social order with the North-West American and North-East Asiatic practices.

Very few peoples, however, have made, out of the symbolic 'personage', a human 'personality', entire and autonomous. The Roman *persona* recalls the masked 'personage' of the Zuni and Kwakiutl. It is symbolized by a transferable *nomen* and *cognomina* and materialized in ancestral *imagines*, of which the perpetuator is a living individual or 'person'. Under Stoic influences mainly, the Greek term *prosōpon*, with the same double meaning of 'mask' and 'personality', acquired a moral content, as characteristic as the legal content of the Latin *persona*. A 'person' thus became endowed with a 'conscience', his own knowledge of good and of evil, which is the philosophical ground of his freedom and his responsibility. This 'moral person' received its full sanction and consecration from Christian metaphysical belief; and while in Roman law civil associations became corporate 'persons', the corporate personality of the Church—'one body in Christ'—led on to controversies about the personality of the Christian God: *unitas in tres personas, una persona in duas naturas*, and the like. From mediæval and scholastic controversies about 'soul' and 'substance' emerged Spinoza's antithesis of 'thought' and 'space', and the new problem—again essentially moral—of the relation of *my* individual conscience with the world and with God; followed by new confessional solutions—Moravian, Puritan, Wesleyan and so on—and the new philosophies of Hume, Berkeley, Kant, and (above all) of Fichte, for whom this category of the human 'person', the 'self', becomes 'the condition both of conscience' and of science—of conduct and of knowledge.

Thus, by the method of social anthropology, can be traced an idea, implicit in masquerade and mask, developing from personage to person, nominal and legal at first, then metaphysical, moral, and religious, as a 'category' or fundamental form of thought and of action. Will this 'category', thus established, endure? In its moral aspect, the sanctity of human personality, it is challenged both by 'an East which has not attained to our science' and in its own metropolis and fatherland. But social anthropology, sociology, and history demonstrate the trend of men's thinking, and the gradual emergence of an idea, and the need for research and for self-knowledge.

A Psychological Analysis of the Negritos of Luzon, Philippine Islands. Summary of a Communication by Kilton R. Stewart, M.A. 22 November, 1938.

The work discussed was done in two periods of three months each in the summers of 1933 and 1937, respectively. Three groups of Negritos were visited. One group ranged on the east side of the Zambales mountains, near Fort Studsonberg, another group on the west side in the vicinity of the army post of Villiar, and the third group ranged in the province of Batan to the south. The work was undertaken in the interest of general psychological theory. An attempt was made to combine the methods of experimental psychology and therapeutic psychology, utilizing to some extent the disciplines of anthropology with the hope that the data gained would be useful in all three of these fields.

Three different types of psychometric tests were employed. In one an attempt was made to establish learning curves, another of these tests was in the province of suggestibility, and the third compared the behaviour of Negritos in novel, non-language mental test-situations with the other racial groups.

A rough analysis of the test results fails to support the theory of racial differences, as there were individuals in all these groups who compared favourably with the higher test-scores of Europeans. The data gathered with the disciplines of therapeutic psychology included free associations under hypnosis, word associations and dreams. The native attempts at psychotherapy were also observed, as well as other ceremonies. Autobiographies and folk-tales were also collected.

An attempt was made to interpret all this material according to the general theories of psychotherapy and psychoanalysis. The terminology and ideology of Otto Rank seemed to be the most useful in unifying the various phenomena. These data also argued for the similarity of the intellectual and emotional natures of different racial strains of humanity.

Committee on Applied Anthropology. Report of a Discussion on Child Labour in East Africa. 28 October, 1938.

The Ven. Archdeacon Owen introduced a discussion on Child Labour in East Africa, with special reference to Kenya. The problem concerns boys mainly and is most acute in the Kavirondo area. In the African social system a child's training for adult life commences in infancy. Traditional crafts, tribal law and morality are taught to children by their parents. The children working together and playing together have an organized social life of their own and a distinct part in the life of the clan. In the changing conditions of to-day many factors are tending to destroy the child's bonds with his own culture. Schools, for example, especially in the case of boys, often require the attendance of pupils for five days a week.

The employment of child labour, however, is a far graver danger to the child's development as a

member of his own society. This is especially true of boys employed in the tea industry. Those working on the goldfields are able to sleep at home and to maintain contact with their families, which mitigates the effect of their being employed all day.

Boys are taken under contract to work on tea plantations as much as 400 miles from their homes. The legally minimum age for this work is ten years, but in many cases age can only be established by guesswork. On the average, African children are not so well developed as European children of the same age. Remuneration at threepence to fourpence per day is good, and a nimble boy can earn as much as an adult. Food, housing, and medical care are beyond criticism on most plantations. But this is no adequate defence of a system which has the most deleterious effects on the character and development of the boys. By law, the parents' consent is required before a child can be recruited for this work. Actually it is impossible to keep a check on this, and many boys are recruited without their fathers' consent. Employers have refused to accept responsibility for repatriating the boys after the expiration of their contracts. Many boys consequently do not return home immediately after they leave the plantations, but wander from place to place, to end up sometimes as juvenile delinquents. Normally the contract lasts six months, but a boy can renew his contract. Thus some remain on the same estate for a year. Unable to obtain the recreation they have been accustomed to, boys have been known to join the beer drinks of the men on the estates, a thing unheard of in tribal society. This has recently been stopped as a result of protests.

While it would be an exaggeration to say that all boys suffer from this system of employment, a great many are thus prevented from getting their roots into the tribal life, rendering many unwilling to submit to parental discipline on their return home. The legal aspect of this system is also open to criticism, since child labour is subject to the same penal sanctions as adult labour.

The employment of child labour on this relatively large scale is due only in part to the shortage of labour in Kenya. It is due also to the nature of the work, for which children are specially suited. The pressure of poverty, and the need for money to meet taxation, compel parents to let their children go out to work. Raising the standard of living in the reserves would do much to prevent it.

Committee on Applied Anthropology. Report of a discussion on Lord Hailey's 'African Survey.' 25 November, 1938.

Mr. J. L. Keith introduced a discussion on Lord Hailey's *African Survey*. Mr. Keith began by describing how the Survey was compiled. Despite the numerous collaborators who drafted or checked various parts of the Survey, it has a unity from which emerges a general picture. We are shown the peoples of Africa passing through an unprecedented cultural and economic crisis, due to their contact with European civilization. This conflict of cultures is the main theme of the Survey.

A few unfortunate errors do not detract from its general accuracy. Owing to the fact also that Lord Hailey is himself one of the greatest of administrators, the Survey retains throughout a sense of reality, lifting it above the level of a merely academic study.

The Survey attempts to set out the facts in such a way that they speak for themselves. But fortunately Lord Hailey has allowed himself to speak his own mind, both in evaluating the existing state of affairs and in proposing steps that should be taken in the future.

Lord Hailey's treatment of the policy of the Union of South Africa is of special importance. The Union, he shows, has a complete scheme of native development, in both the social and political senses, and British colonial policy can be tested in comparison with it. Thus the question is posed: 'Whither is Indirect Rule taking Africa?' Will it be able to bear the strain of providing increasingly elaborate social services? What place can it offer to the educated African? Nigeria, Tanganyika and the Gold Coast exemplify various facets of this problem. The Survey deals comprehensively with the problem of the urban and industrial natives cut off from tribal life, and contrasts the Belgian methods of attacking this problem with its relatively casual treatment by British colonial governments.

Two outstanding chapters are those on Law and Justice, and on Land, subjects which Lord Hailey has made peculiarly his own. Is it possible, Lord Hailey asks, after reviewing the existing state of affairs, to reconcile native customary law and European law so as to evolve a homogeneous system of law for Africa? He draws attention to the conflicting tendencies in the development of land-tenure, and to the possible dangers of premature interference with the existing native system. Lord Hailey makes a fine plea for a wider and more intensive study of African law and custom as a basis of action.

Throughout the Survey, this plea for more, and more thorough, research on the African way of life is reiterated. More study is needed of African languages, African economics, African law and custom, as well as of problems of health, nutrition and so forth, in order to cope with the Administrative problems of Africa.

Lord Hailey is emphatic that the social anthropologist can fulfil a very definite function in the solution of these problems, especially in co-operation with administrative officers. The first phase of the occupation of Africa is over. The Powers owning African colonies now have to tackle universal problems. Purely local measures no longer suffice, and the assistance of the Home Governments is necessary.

Provision must be made for the serious and scientific study of African life as a preliminary to further action. The Imperial government must take the initiative in this. Lord Hailey proposes two measures for the establishment of African research on a permanent basis. He suggests, firstly, the creation of an African Bureau which would act as a clearing house for all information concerning

Africa; and secondly, the foundation of an official body, directly under the aegis of the British government, disposing of adequate research funds, and working largely through existing institutions for social and scientific research. Questions of detail could be settled when it is sought to implement these recommendations.

In the course of the discussion several members of the Committee commented on these recommendations, which were unanimously welcomed. Particular gratification was expressed at the importance attached by Lord Hailey to contribution which could be made by anthropological studies to the understanding of African problems.

PROCEEDINGS OF OTHER SOCIETIES.

International Congresses: 1939 and 1940.

8 The Third Session of the *International Congress of Prehistoric and Protohistoric Sciences* will be held in Buda-Pesth in the summer of 1940, under the presidency of Professor Fr. Tompa. This Congress held its first session in London in 1932 and its second session at Oslo in 1936; and it was at the Oslo meeting that the Congress accepted the invitation to meet at Buda-Pesth in 1940, after the customary four-years interval.

The Eighth Session of the *International Institute of Anthropology* will be held in Istanbul in September, 1939. This is a French society, incorporated under French law, with its office in Paris, and a subsidy from the French Government.

At the same time and place, and by invitation of the Turkish Historical Society, will be held what is described as the *Eighteenth International Congress of Anthropology and Prehistoric Archaeology*. This does not exactly translate its French title *Int. Congrès d'Anthropologie et d'Archéologie préhistoriques*, and the programme includes such subjects as 'blood-groups' which are in no sense *préhistoriques*. Of that ancient Congress, the last regular and independent session was held at Geneva in 1912.

The session projected to be held at Madrid in 1916 was postponed on account of the War. Subsequent meetings under the name of this Congress have been arranged by the French society above-mentioned on its own responsibility; the last of these was held at Bucharest in 1937.

How close is the connexion between this Congress and the French society will be understood from the official announcement that subscribers to the *Institute* may attend the Istanbul session of the Congress without further payment; it is however apparently permitted to join the Congress without having anything to do with the *Institute*; but as papers may be sent either to the Congress-Secretary at Ankara or to the Secretary of the *Institute*, it looks as if a single programme is contemplated. It is announced that on an 'international committee' for scientific preparation Great Britain is represented by Mr. Miles Burkitt; but he has not much to represent, as he is the only British member who did not withdraw from the *Institute* when it took control of the old Congress in 1931. Details of that affair were published in MAN, 1931, 30, 63, 94, 137; compare J.R.A.I. lx. (1931) Pres. Address and *L'Anthropologie* xli (1931) pp. 95-110. J. L. M.

OBITUARIES.

René Verneau: 25 April, 1852—7 January, 1938.

9 Le Professeur René Verneau, Honorary Fellow du Royal Anthropological Institute (1931), Huxley Lecturer (1924, Huxley Medal), est mort le 7 Janvier 1938, à Paris, après une longue maladie.

Il avait été professeur d'anthropologie au Museum d'Histoire Naturelle, (Chaire d'Hamy et, avant Hamy, de Quatrefages), Conservateur du Musée d'Ethnographie du Trocadéro (ayant remplacé Hamy démissionnaire). Il a été l'un des rédacteurs en chef de l'*Anthropologie*, dernièrement avec M. Boule et S. Reinach. Dès avant sa retraite, et presque jusqu'à sa fin, il fut le Professeur d'Anthropologie préhistorique de l'Institut de Paléontologie Humaine de Paris (1922-1937).

Elève à vingt ans de Broca et de Quatrefages, il était devenu à vingt-et-un ans le préparateur de ce dernier, puis l'assistant d'Hamy, auquel il succéda en 1909. Les cours populaires qu'il avait faits à l'Hôtel de Ville de Paris firent beaucoup pour vulgariser nos sciences.

Sa thèse de médecine: *Le Bassin dans les Sexes et dans les Races* (1875) est son début. Ses deux missions aux Canaries, où il retourna encore plus tard en 1934, aboutirent à une œuvre considérable sur les Guanches, l'ancienne population des Canaries, toujours vivante, et ressemblant beaucoup à la race de Cro-Magnon. Il a constamment développé les collections de matériaux Guanches, et communiquait, il y a bien de temps, à M. G. Marcy (Maroc et Alger), de précieux estampages d'inscriptions canariennes non publiées.

Le nom de Verneau s'attache, comme celui de M. Boule, à l'étude des documents osseux qu'on a découverts depuis près de cinquante ans, à Menton, à Barne Grande, à Monaco. C'est lui qui établit—avec M. Boule—, la notion et l'aire d'extension de ce qu'on appelle la race de Grimaldi (1889-1906). Sa *Huxley Lecture* portait encore sur ce sujet (1924). Il s'est aussi attaché à l'étude des anciens Patagons. Tous travaux de grande conscience et utilité.

J'ai passé sur de nombreuses descriptions d'anthropologie, somatologiques surtout. Il a participé

à tout le développement de ces études pendant une longue vie, et y a marqué sa trace.

Dans les dernières années de sa vie, il a contribué à des sortes de manuels d'Histoire Anthropologique abondants et honorables.

Ayant servi pendant la guerre de 1870-1871, il fut bon médecin dans la Zone des Armées de 1914 à 1918.

Il eut de durs débuts; aucun de ses postes, jusqu'au moment où il fut titulaire au Museum, ne pouvant le dispenser de gagner sa vie comme médecin pratiquant. Dans un quartier modeste, il était bon pour les pauvres. MARCEL MAUSS. Paris.

P. V. van Stein Callenfels, O.B.E. : 1883-1938.

10 Born at Maastricht in 1883 Dr. Callenfels studied at Leiden and passed in 1904 into the Dutch colonial service to be stationed at Mojokerto, the modern centre of the once great Javanese Hindu empire, Majapahit. But government service was not to his taste. He became a coffee-planter and acquired that great knowledge of the language, history, and art of the Javanese which led to his joining the archaeological service of the Netherlands Indies in 1913. In 1921 he returned to Leiden and took a doctorate. This return to Europe was a landmark in his career. It fired an enthusiasm for the study of prehistory, which was to be his dominant interest for a quarter of a century. He wrote papers on the first palaeolithic workshop found in the Malay archipelago (at Batu Kemang, Sumatra); on the chronology of the neolithic age in South-east Asia; on excavations

(with Evans) at Goa Kerbau in Perak, and by himself at Goa Lawa near Sampong in the Ponorogo district of Java; a short guide to the prehistoric collections belonging to the Batavian Society, and (in English) in the Bulletin of Raffles Museum (May, 1936), three papers, on the *Kitchen-Middens in Wellesley Province* (Straits Settlements), on a stone implement from Malaya and on the *Melanesoid Civilizations of Eastern Asia*.

More important even than his publications were his personal contacts at Singapore, Manila, Hongkong, Hanoi and Tokio, and the part he played in establishing periodical conferences of the prehistorians of the Far East. Everywhere he was the apostle of scientific method and of comparative knowledge. His personality, his knowledge and enthusiasm, his tact and *bouhomie*, took even the pallid precincts of government secretariats by storm and obtained money for conferences and research. For British Malaya he did much, putting the results of his researches and his methods at the disposal of officers of its museums, assisting in the identification of specimens and the excavation of sites and in the establishment of a permanent exhibition at Raffles Museum, Singapore, of a comparative collection of prehistoric data from the countries of the Far East. His services were acknowledged by the bestowal of an O.B.E. He contracted an illness while excavating in Celebes and died at Colombo on 26 April, 1938. Of gigantic stature, he had a magnificent brain and the heart of an eager, irrepressible child. To those of us who were his intimate friends it seems even now incredible that so much wit and Gargantuan laughter can have gone out of the world. R. O. W.

REVIEWS.

AFRICA.

Source Book for African Anthropology. By Wilfrid D. Hambly, Curator of African Ethnology, Field Museum of Natural History, Chicago, 1937. 2 vols., 953 pp., 111 text figures, 5 maps.

11 This book does not profess to be an encyclopædia of data relating to Africa, but it is claimed for it by the editor of the series that it contains more information about that continent and a better bibliography than any other work in English. This claim would seem to be justified, and in addition most readers will find that the source book is a very much more interesting work than its title might lead them to expect. The information is presented throughout in a lucid and attractive form, and there is an abundant supply of excellent photographs.

The book is divided into four sections. The first is a broad introduction to the salient facts of physiography, biology, archaeology, physical anthropology and linguistic divisions. The second section is a review of the various cultural areas, and in the third an attempt is made to summarize and classify the factual material, though the discussion is for the most part limited to the social, religious and economic traits which are considered fundamental to Negro culture. The fourth section deals with the European period, the history of the exploration and partition of Africa, government policies, and general questions affecting the welfare of the indigenous peoples. Finally, there are the bibliographies and indices.

A source book dealing with so vast a subject—an entire continent—is bound to contain many errors of omission and commission, as well as generalizations and deductions which are at least open to argument. And here are a few. In the section dealing with the Tuaregs (p. 370) we read that "Heads of families unite to form councils, and in each extended family there are several patriarchal chiefs, each having authority over a household. This is a Semitic, but not the oldest type of Semitic organization." Now it is quite pointless to characterize this type of organization as specifically Semitic. It is typical of Negro Society throughout Africa and is, indeed, found all over the world. It is also pointless (p. 480) to quote Delafosse as saying that in the Negro society of West Africa the rights of a father are inferior to those of a mother's brother. This is a meaningless generalization. Dr. Hambly constantly stumbles over the fence of culture-area uniformity, e.g., the suggestion on p. 411 that there is a regional (Eastern v. Western Bantu) attitude towards pre-nuptial chastity can easily be disproved. And in differentiating Bantu from Sudanic institutions he overlooks the fact that Bantu-speaking peoples extend into, and, in fact, right across, West Africa. They live intermingled with Sudanic-speaking peoples. Similarly when he comments (p. 292) on the use of inclusive and exclusive forms of personal pronouns, as though they were a cultural peculiarity of the Bushman, he appears

to be unaware that numerous other African peoples, including Sudanic-speaking tribes North of the Equator, follow the same system of recognizing grammatically the person speaking, the person spoken to, and the person spoken about.

In the chapter on physical anthropology there is a remarkable absence of reference to one of Africa's most peculiar peoples, the Fulani. And in the discussion on stature, Dr. Hambly states that the largest series for the Hausa is that of Tremearne. But measurements for much larger groups are given in the published *Census of Nigeria* for 1931. In reviewing the data on stone monuments, there is no reference to the occurrence of cairns, and in connexion with kinship terminology (p. 475), village organization (p. 497), and secret societies (p. 499) there exists a mass of data to which there is no reference at all. In the chapter dealing with European governments, the references are also haphazard and inadequate. Thus it is said that the history of Nigeria has been surveyed by Mockler-Ferryman and Lady F. L. Lugard. But what about the numerous other works, including the standard history by Sir Alan Burns? It is said, too, that "M. Perham has described 'administration,'" no reference being made here to Lord Lugard's masterpiece *The Dual Mandate*. It is, however, mentioned casually later, in connexion with East Africa. There are important omissions, too, in the bibliographies, such as MacMichael, *History of the Arabs in the Sudan*, Faulkner and Mackie, *West African Agriculture*, Houdas, *Tarikh-es-Sudan*, Ruxton, *Maliki Law*, Abraham, *Tiv*, C. L. Temple, *Native Races and their Rulers*, Mrs. Temple, *Tribes, Emirates, etc.*, and many others.

Other errors and misprints observed are as follows: On p. 29, "National Geographical Society" should be "The Royal Geographical Society." On p. 32 Westermann is quoted as saying that "in N. Nigeria the density of population rises to almost 46 per sq. kilometer." But actually, while the general density of N. Nigeria is 40.58 per sq. mile, in the four central districts round Kano, an area of 488 square miles (exclusive of the city), the density rises to a figure of no less than 430 to the square mile. On the same page it is stated that "while at Lagos the average (shade) temperature is about 80° with little variation, at Kano a dry heat of even 150° is not so enervating." But the 1931 meteorological returns show, at Lagos, a minimum shade temperature of 70° and a maximum of 96, while at Kano the minimum was 54 and the maximum only 110.

On p. 42 it is said that in Nigeria rice is grown "near Lake Chad." Actually it is grown in many parts of Nigeria. Similarly on p. 46 it is said that *Eleusine Coracana* (sic) is a valuable edible grain cultivated in India and E. Africa. But *Corocana* is quite common also in W. Africa. Incidentally there is no mention of the cultivation of coco-yams, which are a very important food-crop in West Africa. P. 55: The date of Rabeh's arrival in Bornu was 1893, not 1895. P. 70: *Glossinia* should be *Glossina*. P. 75: It is said that king-killing prevailed in West Africa up to recent times among the Yoruba. But it was the practice also among the Jukun, Mbum, and no doubt numerous other W. African tribes. P. 326: The parkland area marked 5 on the map is described as pastoral. But it is also agricultural, and, indeed, agriculture is the main occupation. P. 422: *Abusa* should be *Abusua*. *Angi* should be *Agni*. P. 490: "Among the Nasarawa" should read "Among the tribes of the (former) Province of Nasarawa." P. 505: "Ido" should be "Edo"; but the Edo are already included under the term Bini. P. 524: "The Munshi of the Cameroons" should be "The Munshi of Nigeria." P. 527: It is misleading to say that dane-guns have never been widely used for military purposes. They were widely used in West Africa. P. 557: "Indicates" should be "indicate." P. 675: The area of Nigeria is given as 256,000 sq. m. Actually it is 338,593 (or including mandated territory 372,674). P. 683: "French Equatorial Africa includes Colony" requires amendment. P. 837: "Budon" should be "Burdon."

This lengthy list of criticisms may appear to be a belittlement of Dr. Hambly's work. But it is rather the result of a keen study and appreciation of his altogether excellent compendium. It only remains to add that the *Source Book* aims throughout at linking up the various phases of culture. In describing the economic life, for example, the part played by ritual is not overlooked. Religion and magic are shown to be vitalizing principles, success in hunting to be dependent on magical observances, achievement in industry to be bound up with numerous rites and taboos, and so on. In his concluding remarks Dr. Hambly refers wisely to the regrettable tendency of some students to identify themselves wholly with one particular school of thought or technique, forgetting that method should be flexible, and that each form of approach can contribute something to the general stock of knowledge.

C. K. MEEK.

INDIA.

India: A Short Cultural History. By H. G. Rawlinson. Edited by Professor C. G. Seligman. London: Cresset Press, 1937. xv + 452 pp.

The author, whose little work on Bactria is well known to all students of Indian history, attempts to sum up the history and culture of India, relying on well-known works for his materials. It may be said at once that the task has been admirably performed, and that the rather unwieldy volume necessary for the author's purpose contains, with few notable exceptions, all that is required. We learn the leading facts of Indian history, commencing with the Indus Valley civilization, and ending with a brief reference to the period under British control.

Illustrations are provided showing the rock-cut temples and the well-known architectural marvels of Northern India. The reproduction of the Tāj Mahāl is particularly effective; but the famous *Diwān-i-Khās* of Delhi—the 'Paradise on Earth' of the well-known couplet—has somehow been overlooked.

It is to be hoped that this work will find a large circle of readers, though the cynic is apt to suggest that the

more numerous such handy guides to India are, the fewer the number of readers.

With the prospect of a second edition of this work being contemplated, we would add a few criticisms for consideration.

The well-known Russian traveller should be Nikitin, not Nitikin (p. 255n). *Mulk-i-maidān* (p. 259) should be *Malik-i-maidān*. The names of the Hindu gods given in the illustrations in *devanāgarī* characters should be in English, if the general reader is to grasp them. *Benvāsi Vanavāsi* (p. 160) is in Mysore and not in the Dharwar district. The identification of the *Rāshtrikās* with the *Rattas* is open to some doubt, *rashtrika* being in the opinion of some experts merely an official title. The adoption of Baron von Eickstedt's racial theory creating Indid, Veddid and Melanid types seems premature, pending some confirmation of his views. The merely nominal reference to the important *Lingāyat* and *Parsi* communities seems inadequate in a work of this nature.

But Mr. Rawlinson is entitled to our gratitude for the very readable work that he has produced, and it deserves to be widely read.

R. E. ENTHOVEN.

ARTS AND CRAFTS.

The Music of the Sumerians, Babylonians and Assyrians. By Francis Galpin. Cambridge: University Press, 1937. 110 pp., plates and illustrations. Price 25s.

One's only regret about this carefully-written and handsomely-produced monograph is that the late Professor Erich von Hornbostel did not live to see it published. Canon Galpin's descriptions and illustrations of instruments hitherto known of only through literary sources, and now revealed by the excavations at Ur, and the use he makes of ethnological parallels, would equally have delighted Hornbostel, whose own work was tending in a similar direction. We are no longer surprised by curious affinities between geographically dispersed cultures; but some of the comparisons in this book are of the greatest interest and even importance. Canon Galpin finds, for instance, that the cuneiform ideograms employed for the word *uku* in an inscription of the Greek period of 300 B.C., and meaning 'to pipe' on a flute, have their counterpart in the Bantu word *uku*, used for 'blowing a wind instrument,' and that, further, a similar ritual significance is attached in each case to the action, namely, the power of penetrating the heart of the enemy and killing him (p. 15). Hour-glass drums and stringed lyres are common enough instruments in Africa; but both were known in the Sumer of the third millennium B.C. In Sumer, as in contemporary West Africa, drums were entrusted to the use and care of special officers. The book is full of similar links; and every discovery proclaims the interconnection between civilizations whose provenance has hitherto been merely guessed at.

The main body of the book is concerned with a reconstruction of the various instruments, both excavated and illustrated on seals, friezes and inscriptions, and with a brilliant attempt to discover scale-sequences and notation, the *pièce de résistance* being a Sumerian 'Hymn' on the creation of Man, built up from a harp accompaniment, and intended to be sung 'in free recitative' in a manner orally handed down and carefully preserved.

by generations of royal singers. A book of this quality is an event of more than musical importance, and adds much to our increasing knowledge of the material culture of the Middle East. DOUGLAS VARLEY.

Zacualpa: A Study of Ancient Quiche Artifacts.

By Samuel Kirkland Lothrop. Carnegie Institution of Washington, U.S.A., 1936. vi + 103 pp. plates, 7 (3 in colour), text-figures 107.

Of late years the attention of Maya students has been increasingly directed to the study of ceramics and the endeavour to reach a satisfactory relative chronology by stratigraphy, as has been done in the Old World. This is all the more necessary owing to the sharp differences of opinion on the correlation of the calendar, a problem which will no doubt be finally decided by the independent check afforded by ceramics.

Dr. Lothrop has taken a field where very little is known of the ceramics, namely the highlands of Guatemala, and the present work is mainly an account of his excavations at Zacualpa in the Department of Quiché, Guatemala, with some work at Utatlan and other places.

He gives a most valuable and interesting description of the finds and discusses fully the different types of pottery and the relation of these and other artifacts, not only with other parts of the Maya field but also with North and South America. A noteworthy find was a gold disk from Peru, but besides this there is much evidence of trade for great distances both to the north and the south. Dr. Lothrop shows, too, from the Spanish authors, how extensive the communications and geographical knowledge of the Indians were.

The general result of his work is in agreement with that of other recent investigators in the ceramic field, and decidedly tends to show that a short chronology is most in accordance with the evidence from pottery and therefore that the Goodman-Thompson correlation is the most acceptable. The correlations with Peru especially, based on the gold disk, make the Spinden correlation extremely improbable.

RICHARD C. E. LONG.

CORRESPONDENCE.

Preservation of Monuments in the Union of South Africa.

15 SIR,—I enclose for your information a copy of Notices No. 1571 and 1572 as published in the 'Gazette' of the Government of the Union of South Africa on 20 September, 1938, in Vol. CXIII, No. 2569, pp. 955-958.

The Commission for the Preservation of Natural and Historical Monuments, Relics and Antiques, of which it is my privilege to be a member, would appreciate it very highly if you would kindly give the By-laws and Regulations referred to in these 'Gazette' Notices the publicity they merit.

The Commission is most anxious to encourage the exploration of the rich archaeological and palaeontological fields the Union of South Africa possesses, and welcomes research by all who are properly equipped, but, as these new By-laws and Regulations show, it is determined to do everything in its power to ensure proper investigation and to put an end to such reckless exploitation—often unwitting—as has unfortunately been all too common in the past.

C. VAN RIET LOWE,

Director.

No. 1571.]

[20 September, 1938.

PROHIBITION OF THE REMOVAL, OR EXPORTATION OF MONUMENTS, RELICS OR ANTIQUES.

Under section ten (1) of the Natural and Historical Monuments, Relics and Antiques Act, 1934 (No. 4 of 1934), as amended by section four of the

Natural Monuments Amendment Act, 1937 (Act No. 9 of 1937), I, Richard Stuttaford, Minister of the Interior, hereby prohibit—

- (1) the removal of any drawing or painting on stone or petroglyph known or commonly believed to have been executed by Bushmen or other aborigines of South Africa or by any people who inhabited or visited South Africa before the advent of the Europeans, and any implement or ornament known or commonly believed to have been used by them and any anthropological or archaeological contents of the graves, caves, rock shelters, middens or shell-mounds, without the written consent of the Commission; and
- (2) the removal of any vertebrate fossil without the written consent of the Commission;
- (3) provided that this prohibition shall not apply to removals that result from the normal activities of bona fide mining, engineering and agricultural enterprises.

I further prohibit the export of any of the objects mentioned under (1) and (2) above, as well as objects that have been proclaimed or are capable of proclamation as antiques, without the written consent of the Commission for the Preservation of Natural and Historical Monuments, Relics and Antiques.

R. STUTTAFFORD,

Minister of the Interior.

26 July, 1938.

No. 1572.]

[20 September 1938.]

The following By-laws are hereby published for general information in terms of sub-section (1) of section thirteen of the Natural and Historical Monuments, Relics and Antiques Act, 1934 (No. 4 of 1934), as amended by Act No. 9 of 1937 :—

By-law No. 1.—No excavation or removal of relics shall be undertaken without the written consent of the Commission, such consent to be dependent upon the following regulations :—

(1) An applicant for permission to remove and/or excavate relics shall comply with the following provisions :—

(i) At the time of application for permission to proceed, he shall furnish the Commission with—

- (a) a general description of the nature of the objects to be removed;
- (b) a locality sketch of the area from which it is proposed to remove relics.

(ii) As soon as possible after removal and/or excavation he shall furnish the Commission with—

- (a) a description of the objects removed together with particulars enumerated hereunder;
- (b) the name of the person or institution in whose possession the objects are, at the time of furnishing the report; and
- (c) in the case of excavations for archaeological purposes, a complete set of plans and a stratigraphical record in which the positions of all objects are fully set forth.

(iii) He shall be responsible for all loss, damage or injury to persons or property in any manner arising from the excavation works, and shall indemnify the Commission against all claims arising therefrom.

(iv) He shall allow access to the site to all members of the Commission or their representatives at any stage of the excavation works.

(v) The Commission may for good and sufficient reasons suspend or revoke the permit at any time and in the event of the applicant's failure to commence excavation work within six months from the date of the grant of the permit, the permit shall lapse.

(vi) (a) He shall not dispose of any of the objects without the written consent of the Commission;

(b) the Commission reserves to itself the right to retain in South Africa a representative collection from the excavator's finds. It recognizes the discoverer's scientific ownership of all objects recovered, but should the discoverer fail to publish in such manner and within such time as the Commission may approve of, this scientific ownership shall lapse.

(vii) Where the intention of the excavator is the recovery of archaeological and/or anthropological remains only, he shall agree that—

- (a) uncivilized labour will be employed only under proper supervision;
- (b) all material excavated will be put through a $\frac{1}{4}$ inch mesh wire sieve;
- (c) before any human remains are disturbed, they shall be photographed *in situ* showing their relation to stratified deposits; clear sections of stratified deposits shall also be photographed; copies of such photographs to be submitted to the Commission with notes with as little delay as possible;
- (d) except with the specific authority of the Commission, not more than one-half of the known area of each deposit or site shall be demolished, removed or excavated, the remainder to be left intact and to include a witness section.

(viii) Application for permission to excavate and remove relics must be made on the prescribed form as set out in the First Annexure to these By-laws.

The form of Permit to excavate and/or remove relics and fossils shall be in the prescribed form as set out in the Second Annexure to these By-laws.

By-law No. 2.—Before any object as defined in section four of the Natural Monuments Amendment Act, 1937, or any relic within the meaning of the Natural and Historical Monuments, Relics and Antiques Act, 1934, can be exported from the Union of South Africa, application for a permit to export must be made to the Commission on the prescribed form as set out in the Third Annexure to these By-laws.

The form of Permit for Export shall be in the prescribed form as set out in the Fourth Annexure to these By-laws.

In terms of section nine (3) of the Natural and Historical Monuments, Relics and Antiques Act, 1934, applications must be accompanied by a drawing or photograph of the object or relic in question and the applicant shall state the exact locality in which it is situated and the place to which and purpose for which it is desired to export it.

By-law No. 3.—The Commission reserves to itself the right in special cases to issue permits for removal and/or export of objects and relics under conditions other than those enumerated above.

By-law No. 4.—Contravention of or non-compliance with the above By-laws shall render the offender liable to a fine not exceeding twenty-five pounds.

Creole Dialects, and Trade Jargons.

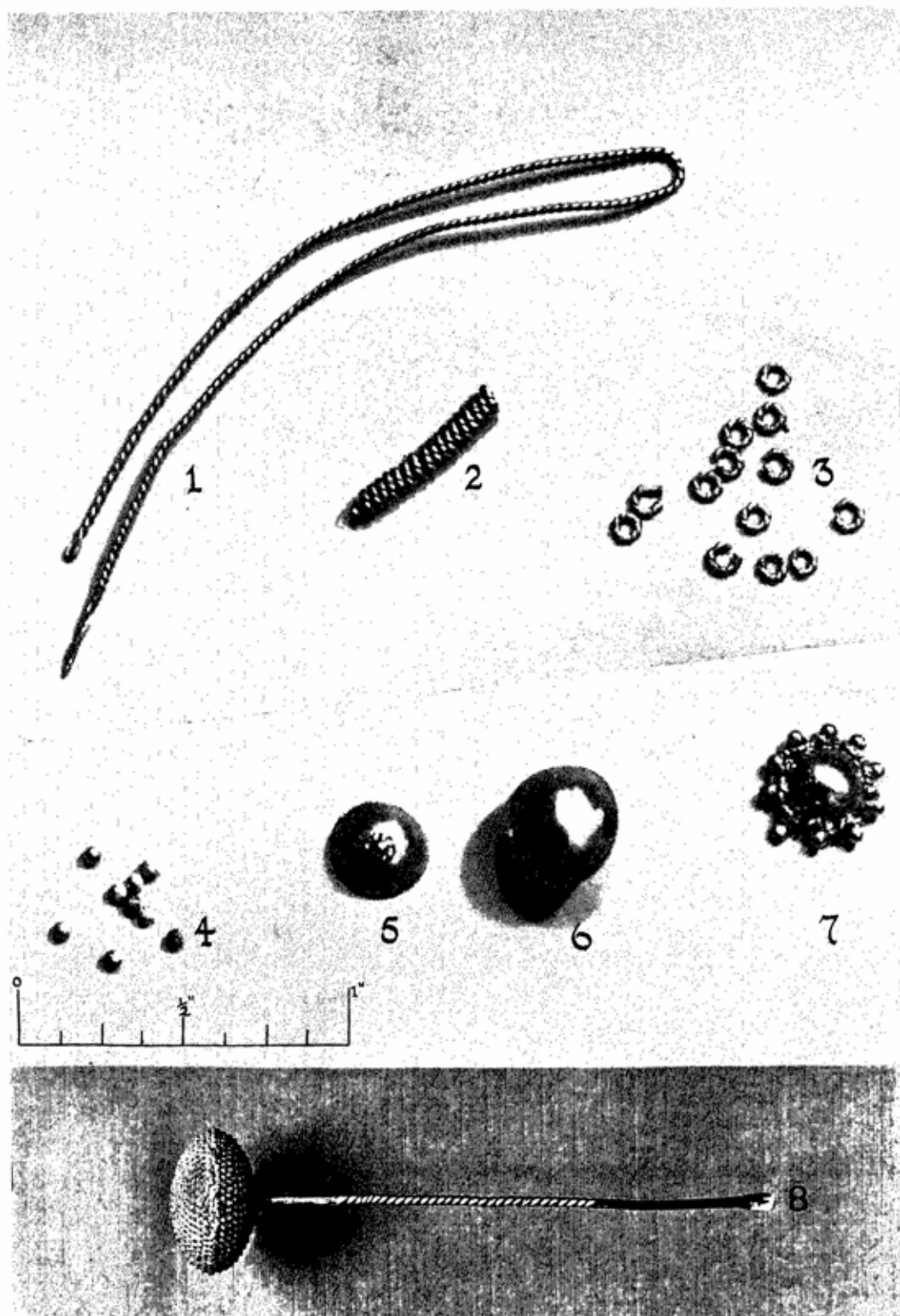
16 SIR.—I am engaged in a study of the sociology of creole dialects, trade jargons, and similar jargons which arise on cultural frontiers. Many such jargons are barely mentioned in the literature, while others are probably not mentioned at all. I have already gone through the linguistic and anthropological journals, and have seen most of the extensive literature of European creole dialects, but would appreciate references to obscure periodicals and other literature, as well as direct information as yet unpublished, particularly on non-European jargons.

While the bare mention of jargons as yet unrecorded in the literature will be of value in showing the extensiveness of the phenomenon of 'jargonization,' I should appreciate, wherever available, information on the following points :—

- (a) Location of the jargon; tribe(s) speaking it;
- (b) Language on which it is based;
- (c) To what extent a knowledge of it is spread—i.e., among the whole population, among adult males only, among a small minority of males;
- (d) Approximate date of its formation;
- (e) Circumstances under which it arose;
- (f) Its functions: whether as a trade language pure and simple, or as a language of command on plantations, in administration, etc.;
- (g) Whether used or not as the domestic language of any group;
- (h) Whether used or not in religious or other instruction;
- (i) Its spread or decline;
- (j) Its prestige; attitudes toward it.
- (k) Mention in the literature.

3571 Pahoehoe Avenue,
Honolulu.

JOHN E. REINECKE.



STAGES IN THE MANUFACTURE OF A 'NTIRIBA' HAIRPIN
AT OBUASI, ASHANTI.

MAN

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ORIGINAL ARTICLES.

Africa West

With Plate B.

Wild

THE MANUFACTURE OF A 'NTIRIBA' HAIRPIN AT OBUASI, ASHANTI. *By Capt. R. P. Wild, Inspector of Mines, Gold Coast.*

17 The following account of a method whereby spherules of metal are made and welded into a metal sphere, for use as a hairpin, was obtained by the writer at Obuasi, Ashanti, during July and August, 1937. This type of hairpin is called *Ntiriba*: in Ashanti, *ntiri* = 'head'; *ba* = 'ball.'

For the purpose of illustrating each stage of the process, a small bar of silver alloy, 1/16th square inch in section, was provided, which first was annealed and beaten. By alternate heating and beating the bar was elongated until its cross-section was reduced so that it could easily be inserted into a set of steel rolls. The rolls were worked by hand, and were of European design and manufacture. Under the pressure of the rolls, and with repeated annealing, the beaten metal was sufficiently drawn out until the cross-section was small enough to pull through a steel wire-drawing gauge, also of European make. At this stage the metal is in the form of a length of thick wire.

The gauge is laid flat over a rectangular notch cut in a block of wood. The gauge and the block of wood are held down with the foot and the thick wire, which has had one end pointed by filing, is drawn through the holes of the gauge by the aid of a pair of pliers. By alternate heating and drawing through a series of consecutively diminishing holes the wire is drawn out to the required degree of fineness.

When the wires are fine enough, two of them are twisted together at one end by hand. These two wires are then laid on a flat surface such as a table-top or a floor, which must not be too smooth, otherwise sufficient grip for the subsequent operation of twisting would not be obtained. By the aid of a piece of wood about 1 foot in length and 1 inch to 1½ inch in width, which is pressed down on to the wires to be twisted, and is thrust rapidly forward, in one direction only, by the right hand, the twisting of the two wires together is completed. (Plate B, fig. 1). The left hand is employed to hold the hand-twisted ends of the wires firmly in position. It is remarkable what a fine and even twist can be obtained by this simple method.

A strand of this twisted wire is now taken and coiled on a cylindrical rod or mandril, the first three or four coils being started by hand, and then the mandril is laid on a flat wooden surface and rapidly rotated in one direction by the aid of the same piece of wood used for twisting the wires together, and in a similar manner. The result is that the double wire coils itself round the mandril, and when the mandril is withdrawn an even and long spring of coiled wire is produced (fig. 2). By varying the size of the mandril, coils of different diameters can be obtained. Each coil is next snipped by a pair of scissors and a number of nearly complete rings of uniform size are formed (fig. 3). It appeared to the writer that these two methods were employed in order to obtain equal quantities of metal for the next operation.

A ring is now placed on a block of charcoal, with sometimes the addition of a little borax, and heat is applied from the flame of a blowpipe. The flame is supplied by a floating wick in palm oil. On melting, the metal ring runs into a little sphere, through spherical attraction. In this manner a number of metal spherules of the same size are produced (fig. 4). It can easily be

understood that the size of the wire and the rings will determine the dimensions of the spherules.

The next part of the process in the making of the hairpin consists of the construction of the metal ball on to which the spherules are to be welded by fusion, and is carried out in the following manner:—A portion of the elongated bar of metal, prior to its subjection to rolling, undergoes further beating and annealing, after which it is placed in another set of rolls, and flattened by alternate heating and rolling, into the form of a thin sheet. From this sheet two circular discs are punched out in accordance with the required diameter of the ball. These discs are struck on a small swage-block (of European make) with a hammer, and the sheet metal is forced into a cup-shaped cavity, the resulting shape being a hollow hemisphere.

During the next stage, the hemispheres of metal are covered with borax and water, and some of the rings are placed in position on their surfaces with a feather. The rings and the hemispheres are then placed on charcoal, and the flame of the blowpipe is directed near and around them. The tip of the flame does not touch either the rings or the metal hemisphere. In this way fusion-welding takes place between the surfaces of the rings and the hemisphere. The small spherules of metal are then taken, dipped in borax and water and placed on each ring. The blowpipe flame is applied as before, care being taken not to allow the flame to touch the spherule or the ring. Small pieces of silver alloy about 1/16th square inch are then cut out of the sheet metal and one of them is applied to each spherule and ring, in turn, by a feather, borax and water being used as before. The blowpipe flame is then applied; the sheet silver melts, and welding by fusion takes place (figs. 5 and 7).

The two hemispheres, each with its spherules and rings in place, are clamped together and small pieces of sheet silver alloy are applied at their equator. Welding by fusion is then carried out by the aid of borax and the blowpipe. This completes the construction of the head of the pin. Fig. 6 shows two hemispheres welded together, but without the rings and spherules.

The pin is then welded to the head, and the hair-pin is ready to be cleaned up, boiling it in a mixture of alum, salt, the juice of limes, and water.

As is usual with so many examples of native craft, the writer was unable to trace the origin of the process; neither was he able to discover the method employed in order to obtain metal in the form of wire or sheet, prior to the introduction of European aids.

The objects illustrating the various stages in the construction of a *ntiriba*, together with a complete specimen, have been deposited in the Sub-Department of Ethnography at the British Museum.

One other point of interest should be mentioned in connexion with the end of the pin which is inserted in the hair. This end is beaten thin and hollowed so as to resemble a miniature spoon. Mr. H. J. Braunholtz, of the British Museum, has suggested that it might have been used as an earpick or as a snuff-spoon. Combined hairpins and snuff-spoons of bone are well known from South Africa, though not from West Africa. The writer, however, in view of the elaborate coiffures in vogue among certain sections of the Gold Coast peoples and the time taken in their erection, prefers to consider that the spoon-shaped end is used for the purpose of scratching without unduly disturbing the hair.

COUVADE IN ALBANIA. By Mrs. Margaret Hasluck.

18 Philologists interested in the Albanian language have for some time been aware that the *couvade* was formerly practised in Albania. For an early dictionary of Albanian, the *Λεξικὸν τῆς Ἀλβανικῆς Γλώσσης* published at Athens in 1904 and compiled some 30-40 years earlier by Constantine Christophorides, a native of Elbasan, Albania, contains the entry: *mërkosh* (Dumre, Shpat), *man whose wife has newly had a baby and who stays in bed like the woman and*

receives visits from his friends. I have transcribed into Albanian lettering the Greek of the original, and translated into English the Albanian explanation given by the author. As Albania is not mentioned by the 'Encyclopædia Britannica,' s.v. *couvade*, the citation may have escaped the notice of English anthropologists, and so I republish it here, together with the results of my inquiries about *couvade* in Albania.

As the peasant informants of Christophorides were entirely unschooled and untravelled, their assertion that the *couvade* was an old (but long disused) custom in their villages may be taken as correct. My inquiries show that all information now available about it is confined to a small area centring round Elbasan. The districts of Dumre and Shpat, where Christophorides found the word, lie respectively south-west and south of that town, which is their usual market. I have myself found the word also in Chermenika, a district north-east of Elbasan, which is its market town, and in Zabsun, a village still farther north-east of Elbasan. But my inquiries in the towns of Berat, Korcha, and Scutari, their adjacent villages, and a number of mountain tribes, all discovered nothing. Mr. S. Koleas, the well-known Albanian scholar who has long been engaged on making an Albanian-French dictionary, has recorded the word, but unfortunately not its provenance; the spelling, *merkosh*, which he gives would suggest a North Albanian origin, but too uncertainly to serve as a basis of deduction.

In Shpat I have found nobody who knows of the custom, but several elderly people who use the word in the sense of 'lazy' in such phrases as *rri si markosh* ('he idles like a *markosh*')—the difference in spelling is immaterial, as Shpat is on the borderline between the Tosk (south) and Geg (north) dialects of Albania, and Tosk *ë*, pronounced like *e* in French *table*, is commonly represented in Geg by *a*. In Elbasan itself, where Christophorides first heard of the custom from an old man called Hasan Effendi Dashi (as I am informed by Mr. Lef Nosi) both the word and the custom are still known to a few elderly people, who make such remarks as *Pse rri ashtu si markosh e s' luen nga vendi?* ('Why do you sit like a *markosh* without moving from the spot?') and *U! m' u-ka ba si markosh!* ('Oh! he's grown fat and lazy like a *markosh*!'). In Chermenika the word seems obsolete, but I once found a man of sixty who had heard his grandmother use it in the sense of 'lazy-bones' and explain its use by the custom. In Zabsun the word is still used on occasion as a synonym for 'lazy,' but the custom, if it ever existed, has been forgotten. The meanings of the word recorded by M. Koleas are *indisposé*, *ennuyé*.

Philology is not my business, nor does it necessarily interest readers of MAN. I may,

however, state briefly that Professor Capidan derives the word *markosh* from the Slav root seen in Roumanian *mărc, mărcav*, ('dull,' 'lifeless,' 'tired,' 'indisposed': *Revista Filologica*, II, pp. 102 f.). In the same review (II, pp. 359-61) Professor Jokl energetically combats this opinion, and repeats his own derivation of the word from the Albanian pejorative suffix *-osh* and the old Albanian root seen in *she-mër, she-mërk*, 'concupine' (cf. his earlier publication in *Linguist-Kultur. Untersuchungen*, pp. 10 ff.). But Mr. Koleas suggests a still easier derivation from the Albanian suffix *-osh* as above, and the root seen in Latin *marcere* ('wither,' 'droop,' 'be faint,' 'feeble,' 'languid,' 'lazy'). This suggestion gains plausibility from the existence in Albanian of such words as *mrenj*, 'I bruise'; *i mretur*, 'bruised,' and *mërqanj*, 'I crush, bruise'; *i mërqajtur*, 'crushed,' 'bruised.'

According to the evidence summarized in the 'Encyclopædia Britannica,' s.v., the *couvade* was widely distributed in Europe in ancient classical times; for that reason it may have been general in Albania. If so, Elbasan is one of the places where it was most likely to survive. Until the development of modern communications in my own time, both the town and the surrounding districts were among the most backward and conservative in the country, so that old words and customs have survived there after disappearing elsewhere. Of such conservatism there is plenty of evidence in the folklore; an infant, for instance, is strapped for a few days immediately after birth to a board, most primitive of cradles; a bride must bow to the fire on the hearth when first introduced to her new home; Charon's obol is still buried with the dead; and at certain intervals after death a fire is lit at the grave 'to warm the dead person.'

As I read the story, then, the *couvade* may once have been practised in all Albania, in common with large tracts of the rest of Europe; but if so, both its name and its existence have been forgotten, except in backward Elbasan and district; and within that area, in some places such as Shpat and Zabsun, the custom has been forgotten and only the name survives, and that in a derived sense. The case of two brothers, peasants of Shpat well known to me, seems significant. The elder, a man of 52, knows that *markosh* means 'lazy' but not why; the other, his junior by 17 years, does not know either the word or its

origin. They are sons of different mothers, the mother of the younger coming from the same village as the father, and that of the elder from a different village. The latter may be held to have brought the word from her own village.

No explanation of why the husband took to his bed is now forthcoming in Albania. I suggest, without evidence, that it may have been an attempt to draw away from his wife such harmful influences as the evil eye. The terrors of childbirth—ghastly real in these regions—are all ascribed to such supernatural agencies, and many precautions are taken to protect the woman. Well-known amulets are put under her pillow or hung round her neck, she is never left alone or without a light, and at night, most dangerous time of all, a rope is passed round her bed, which is as usual on the ground, in the belief that the evil influences cannot step across it to reach her—potent for harm though such influences be, their physical powers are in popular belief singularly limited. The principle behind amulets is, it is well known, to attract attention to themselves rather than to their wearer. What better way of protecting a woman in childbed could be found in primitive times than to make the husband take to his bed—in another room or not—so as to fool the evil influences, who never seem credited with a ha'porth of intelligence, into thinking that he was the patient and so the proper object of their unwelcome attentions?

Postscript.—After the above was in page-proof, I discovered that a case of *couvade* occurred in Elbasan on January 28th, 1924. A certain Gjon Pal Poplekaj, a Roman Catholic belonging to the tribe of Dushmen in North Albania, had come to work in Elbasan and married an Orthodox girl from that town. On the birth of their first child, Margarita, the Orthodox women went to congratulate the mother and to their horror found the husband in bed beside her on the floor. 'It

'made us feel very shy,' (*na erth shum turp*) my informants say. His mother-in-law, who had no doubt been scandalized enough herself, explained that he was following the custom of his distant tribe.

Unhappily the good folk of Elbasan so laughed at the man that he has not dared to do *couvade* at subsequent births, and even denies that he did so at Margarita's. His mother-in-law also denies his doing so, though both know how many Orthodox women caught him in the act, and what an outcry it caused. There is thus no hope of extracting an explanation of the custom from him or her. Perhaps some old woman in Dushmen might be more communicative.

Mr. Koleas finds a possible explanation of the custom in the following folktale from Berat. Once the women of that district felt that it was unfair that, while men went scot-free, they should have both the pain of bearing children and the trouble of rearing them. At a mass meeting they decided to implore the help of the nameless Saint of Tomor, the handsome mountain overlooking Berat. All together, they prayed to him to divide the burden, giving the men the pangs of childbirth and leaving the women to rear the children. The Saint consented and the women left happily for home. Soon afterwards, one's time came. Instead of her husband, however, it was a neighbour who felt labour pains. When this happened a third time, the husbands in general made themselves so unpleasant that the women saw things were worse than before. Again assembling they prayed to the Saint to restore the old ways, and so women continue to endure the pangs of labour as well as the worry of rearing their offspring.

On the basis of this tale Mr. Koleas suggests that *couvade* may have been a sign that the husband recognized the child as his, a certificate of legitimacy, as it were.

A NOTE ON THE CLASSIFICATION OF HALF-HAMITES IN EAST AFRICA. *By J. H. Driberg, Cambridge.*

19 Both language and culture indicate that the group of tribes designated as 'Half-Hamitic' are the result of a fusion between Nilotics and Hamites, but the classification is too broad a one to be really serviceable. Clearly in the case of such a fusion there will be tribes which incline more to their Nilotic ancestry, and others which tend to preserve Hamitic traits to

a greater extent. I suggest, therefore, that a sub-classification of Half-Hamites is desirable into (1) *Nilo-Hamites*, consisting of those tribes in which Nilotic traits are more pronounced, and (2) *Hamito-Nilotics*, among whom Hamitic traits predominate.

Somatic data are insufficient to provide any distinguishing criteria, and the linguistic test is

not entirely satisfactory: but there are other criteria, which appear to be convincing and may be briefly summarized.

| <i>Nilo-Hamites.</i> | <i>Hamito-Nilotics.</i> |
|-----------------------------|------------------------------------|
| No circumcision. | Circumcision. |
| Weapons— | Weapons— |
| Throwing-spears. | Stabbing-spears. |
| Half-spears. | Swords |
| Wrist-knives. | Oval shields. |
| Finger-knives. | |
| Rectangular shields. | |
| Metallurgy. | No metallurgy. |
| Labret. | No labret. |
| No friction drums. | Friction drums. |
| No bull-roarer. | Bull-roarer. |
| 'Father of the soil.' | No 'father of the soil.' |
| Hunters and eaters of game. | Neither hunt nor eat game. |
| Strong clan-system. | Clan-system relatively weak. |
| Rain-makers important. | Rain-makers unimportant or absent. |

The tribes concerning which we have sufficient knowledge may be classified in accordance with these criteria:—

- Nilo-Hamites.*
 Lotuko and Lotuko-speaking tribes, Ajie, Topotha, Didinga and Didinga-speaking tribes, Karamojong, Dodoth, Turkana, Murle, Iteso, Suk.
- Hamito-Nilotics.*
 Masai, Kipsigis, Keyu, Nandi and the Nandi-speaking tribes, Suk.

Note 1.—The Suk are a marginal people, of whom tradition says that they consist of fugitives from such neighbouring peoples as the Nandi, Karamojong, and Samburu. Consequently, though in the main their culture is Hamito-Nilotic, yet they have so many Nilo-Hamitic traits (e.g., metallurgy, labret, rectangular shield,

throwing-spears, wrist- and finger-knives) that they cannot be precisely classified.

Note 2.—The Topotha and Ajie appear to be the only tribes in their group without rain-makers, but in all other respects they conform with the classification.

Note 3.—A few of the Southern Turkana practice circumcision in imitation of the neighbouring Suk, but circumcision among them is an individual idiosyncrasy and not a tribal custom.

Note 4.—Linguistically the Didinga and Didinga-speakers (and to a lesser extent the Iteso) are Hamito-Nilotics, but culturally they are Nilo-Hamites. In general, however, language follows the cultural classification, but whereas the Masai give the clearest evidence of their Hamitic inheritance culturally, the Nandi group is closer to its Hamitic origins linguistically. The Hamitic sentence-order, the development of inflections and grammatical distinctions of sex are more generally emphasized among the Hamito-Nilotics than among the Nilo-Hamites, though grammatical gender is sporadically characteristic of both sub-groups.

Note 5.—Professor Seligman distinguishes the Bari from the Bari-speakers of the West Bank of the Nile and would doubtless classify them with the Nilo-Hamites. Linguistically they might possibly be so classified, but in view of the marked divergence of their culture I prefer to regard them as Sudanians who have been subjected to a half-Hamitic influence, which has modified their language.

IRRIGATION IN BUGUFI, TANGANYIKA TERRITORY. *By R. de Z. Hall.*

20 Bugufi is a small chieftdom in the Lake Province of Tanganyika Territory, in the angle formed by the confluence of the Kagera and Ruvuvu rivers, and geographically and ethnologically part of the neighbouring territory of Urundi, under Belgian mandate. It displays the typical symbiotic pastoral-agricultural social organization of Hima countries.

A famine in this area in 1929 brought under review methods of increasing and stabilizing the food supply, in the course of which there came to the notice of the administration an extensive series of irrigation furrows, most of which were in disuse, save in a few particularly active villages. The country is hilly and plentifully supplied with small, fairly fast-flowing streams, from which the furrows are led off without pumping or otherwise

lifting the water, save by small dams of sods. The furrows, which are narrow and shallow, are gently graded, and constructed partially by digging out and partially by building up sods on the lower side. There are breaches in the furrows where water is required for irrigating cultivation, these being filled with sods or clay when irrigation is not required. These furrows are usually several yards long, and there is one almost a mile long, the furrow being led round the spur of a hill, and through banana groves, until the required point is reached.

It was found that desuetude was due to the prognostications of a woman magician and rain-maker, named Nyabingi, that drought and sickness to man and cattle would ensue on their continued use: this appears to have been about

1910. Her credit was badly shaken by the drought which preceded the 1929 famine, and there was very little opposition to an order by the Native Administration, at the instance of Government, that irrigation should be revived, with a view to enabling cultivation over a longer period than normal rains allowed, and in many favoured places throughout the dry season.

The people had not forgotten how to maintain and to use the furrows. Repairs were executed by the people of each hamlet, working communally under the supervision of the village headmen or their assistants: and no case of dispute over the allocation of water, which was controlled by the headman, to each villager who was served by a furrow, was observed during the two years that I was stationed in the area. The construction of several new furrows was called for, and these seldom appeared to present any difficulty in grading, though no mechanical contrivance was used. Only when rock was encountered was

there a tendency to go down hill and then up again, or *vice versa*, to avoid it; the rock being dug out later, or built over with sods.

A year later, communal coffee-nurseries were established, and several intelligent village-headmen sited these by furrows, in order that water should be readily available. In each case they affirmed their right to control and to draw upon the water, without overt dispute; both Tusi and Hutu headmen being concerned.

This system of irrigation is in no way connected with the watering of cattle, which in any case do not rely on running water. Even where running water is plentiful, the cattle are often watered at wells dug out adjacent to the streams, the water being drawn from thence by buckets into clay troughs. The larger herds of cattle receive very little water near the grazing grounds, being driven considerable distances, sometimes as much as ten miles, twice a week, to papyrus swamps, where the water is slightly saline.

THE DEATH AND REPLACEMENT OF A DIVINE KING IN UHA. *By W. B. Tripe, Secretariat, Dar-es-Salaam. Illustrated.*

21 In MAN, 1935, 54, I was able to describe in detail a lengthy and complicated ceremony through which a new chief of Uha comes to be recognized as a priest-king and possibly as a divine-king. In the following article I shall describe the burial rites of the Chief or Mwami of Manyovu-Ujiji (Uha), and the ceremony whereby the power of the divine office-holder is transferred to his successor. The description is not only interesting as a comparison with the practice followed in the neighbouring chiefdom of Heru in Uha, but it also demonstrates once more the consummate statecraft of the Tusi or Hima chiefs who penetrated the country of Uha from the North with their great herds of large-horned Ankoli cattle some two centuries ago, and subdued the turbulent and primitive Ha, not by force of arms, but by the expedient of creating themselves the divine head of the people, and diverting and modifying the peoples' animistic beliefs, through their doctors and priests, to this end. Whereas clan heads and others formerly carried out such ceremonies as would satisfy evil spirits and preserve the safety of the clan, the Tusi rulers converted them into officers of state who could do nothing except through the medium of the new ruler, who himself becomes the chief object of veneration in the great phenomena

of life: birth, marriage, death, the planting and growing of crops, and the thanksgiving for those crops and all things believed to have life.

I. Death of the Mwami and departure into the spirit world of Imana.

When it is thought that the Mwami is about to die the chief officers of state are called in: Lugwe, of the Chief's clan, called the *Bulio* or Right Hand; Ndagiwe, the *Mimosa* or left hand; Linga, Head of the *Wiru* or slave-clans (he is also guardian of the sacred drums and tribal spears), Milisano, Chief *Mteko* of the Ujiji Ha (now living outside the boundaries of the Chiefdom as recognized by Government), the Chief's guardian called the *Ninaruheka*, and the four *Abagabo* or councillors of state. The Mwami's sons will also be present and certain favoured relatives.

After the question of an heir has been discussed (he will usually be one of the Mwami's sons) Linga will hand *M'kalinga* to the dying Mwami, who will breathe on the spear and nominate his successor. Thereafter no pretender or evil-minded person may steal or even lift *M'kalinga*, for the spear will become too heavy to move. *M'kalinga* is put with living class of nouns prefixed by *M*.

After death the body is swathed in a simple white cloth and taken in a chair by eight bearers

to the sacred grave called Mkabogo. Half the articles used by the Mwami in life accompany the body on this journey; a basket containing four cloths, beef fat, honey, a drinking vessel, a carved wooden milk-container, a hair-comb, a spear, a knife, a bow and arrows, and so on. These articles will be handed later to the *Bahamvi* or buriers, together with two *silitunga* skins and one ox. The skins and ox constitute part of their payment, while the chief's articles will be used by him in the spirit-world.

The *Bahamvi* or buriers, the head of whom is Bambubike, inherit their office. Bambubike is forbidden to see the Mwami in life and he him. Nor must either come within view of each other's village. Bambubike's two assistants have no such taboo.

The body is not however received at once by the *Bahamvi*. It is first handed to the *Wiru*, whose head is Linga. They await it at Mkabogo where Linga lives. It is their business to prepare the body for burial. This takes from five to seven days, during which the total payment due to the *Bahamvi* is collected by the defunct Mwami's family. On the last occasion this consisted of six heifers, two oxen and three large pots of beer. When these are finally collected, they are sent to the *Bahamvi*, who then proceed with their ceremonial, the body having been moved from the sacred grove to the burial huts at Machaso, some two miles in the direction of the Mwami's village.

Linga, as head the *Wiru* or slave-clans, is a very powerful man in the tribe. He is descended from the chief slave who accompanied the first Mwami to this part of Uha called by them Ujiji after the Mwami's clan name. Although the famous town of Ujiji was formerly within the Mwami's territorial jurisdiction, its real name is Ugoi. The town was misnamed by Arab slave traders and the early explorers. He takes an important part in choosing the Mwami's successor and as already mentioned is guardian of the sacred spears and drums.

These drums which remain at Mkabogo are :—*Nyaluzi*, the wife; *Nyamatama*, the master, her husband; and *Nyabugongo*, the father of both. The 'father' is a very small and old drum suspended on a trestle. Linga must anoint these drums with beef oil dedicated to Imana, the great spirit.

The three spears are :—*M'kalinga*: This spear must never be parted from the first two drums,

save on his journey round the boundaries of the country with the newly created Mwami, and (of course) at the death bed of the Mwami. *Lusologo* and *Luhuga*, which must never leave the grove except in the funeral procession by dead of night to Machazo, and at the installation of the Mwami.

Another member of the *Wiru* is an *Mtwale* or Sub-chief. This is Mabruki of Ngambazi. So close is the regard of the Mwamis for the *Wiru* and theirs in turn that many of the *Wiru* came to look upon themselves as sons of the Mwami. Mabruki, for instance, called himself son of Lusimbe, a former Mwami, even though there was no legal or recognized blood-relationship. No doubt many of the *Wiru* women were concubines to the men of the reigning clan, though marriage outside recog-



FIG. 1. THE BAHAMVI AND THEIR DRUMS OUTSIDE THE BURIAL-HUT OF MWAMI MGASSA.

Photograph by R. C. H. Greig and W. B. Tripe.

nized Tusi clans was forbidden on pain of death, even to a Mwami.

The *Wiru* anoint the body with beef-oil and pour on it water scented with the smoke of sweet-smelling woods. When the time is ready for the *Bahamvi* to receive the body at Mkabogo, the drums are hidden, for the *Bahamvi* are forbidden to see them. The relatives accompany the *Bahamvi* and pay a white ox to the *Wiru*. The body is removed to the burial-huts at Machazo with great secrecy in the dead of night. A black ox awaits the body, and is slaughtered on its arrival. When this is done, the burial drums are struck so that the populace may know that the body has come to its ancestral resting-place.

The *Bahamvi* skin the ox, and eat the flesh ceremonially. The skin is removed with great

care so that only one aperture is made. The body is passed through this aperture and the skin sewn up. It is then placed on trestle in the burial-hut, newly built for the purpose, and a fire of sweet-smelling woods is lighted under it. For the next month or until the new moon is seen, the body is smoked in its skin night and day. During this time the drums are played and funeral dirges sung. A great hush is noticeable throughout the country. Not until maggots or worms come through the skin is the Mwami's spirit released. It then goes back to the life-source, Imana. Before this happens, black and white lions, the re-incarnation of former Mwamis, may be seen or heard wandering in the vicinity. Former priests (*Wateko*), now reincarnated in the form of pythons, are also to be observed in a restless state.

The worms and maggots are put into a bowl containing milk, and carefully preserved until the new Mwami is given his name in the grove at Mkabogo. At this time they are offered to the spirits of the grove, and particularly to Imana and the Mwami. When the skin containing the body is completely dried up, it is slit open and the body removed. The Bahamvi extract the nails from the hands and feet, and sew them up in the skin, after severing the horns. What flesh remains on the Mwami's bones is scraped off; the bones are dis-jointed and placed in a small coffin hollowed out from a *mulinzi* log. The skin and horns are tied under the coffin and the whole is placed on the trestles, there to be smoked till the death of the next Mwami.

The fig tree (*Mrumba*) sacred to Imana is planted round the hut.

The trestles are put $3\frac{1}{2}$ feet high. The coffin is 30 inches long, diameter 10 inches. It has a loose lid, tied only with native twine. The burial hut is of Ha beehive-design, though squatter than usual, only 7 feet high at the apex. Each defunct Mwami has his separate burial hut. These are ranged round the central dwelling-huts of the buriers. The burial drums are eight in number, made of *muyovu* wood. The chief drum is called *Kuliaka*, it is 38 inches high and is shown on extreme left in Fig 1.

II. Replacement of Divine-King.

When the soul of the deceased Mwami has been released, he who has been mentioned in his place is conducted by Linga, head of the Wiru, and members of the council, to a secret dwelling,

where the two drums called the 'master' and his 'wife' have been taken. Over the lintel of the door the spear *Mkalinga* is hung. Then all those present except Linga and the Ninaruheka guardian of the Mwami (in this case Mtwale Rugiga) withdraw, and the Mwami's body is examined in detail for any physical defect. Should there be any, the council must be informed at once, and all the previous proceedings will be null and void.

There being no physical defect, he who is to be Mwami is conducted to Linga's dwelling in the sacred grove. As he goes they munch millet (*mtama*) and spit it on his chest to call blessings upon him. As with Guassa III, of Heru in Uha, this journey must be carried out with the greatest secrecy, as none but initiates must look upon him;



FIG. 2. MWAMI SEATED ON THE 'LIVING STOOL.'

Photograph by R. C. H. Greig and W. B. Tripe.

so delicate is his state. The spirit of Imana is going into him and he is in the process of becoming one with the spirit. On the way, Kagunga stream must be crossed, and here he is washed ceremonially by Linga; his grief and his weaknesses are thus washed away. On arrival at the grove, his spirit-wife, a virgin who has not menstruated, is presented to him. Here he stays undergoing instruction and further initiation until the new moon is seen.

In the meantime a ceremonial village has been built near-by, where the council and a multitude of people await him. Linga brings out the royal and sacred toga made from the bark of the fig tree (*mrumba*) and invests him with it, saying:—

'You are Mwami, you have risen above all people, all things bow before you, even the heavens take the country but have regard for all people showing favour to none, not even to those connected with you by blood.'

The Mwami is then conducted to Lubanguza, the 'living stool,' the descendant of the first Ha tribesman to accept the original Mwami. The Mwami then sets in the lap of Lubanguza, who is himself clothed in a leopard skin and seated on a *gi-ha* mat (*kilago*). The Mwami is thereupon surrounded with the royal insignia.

On the right hand stands Lugwe the High Priest (*Mteko Kkuu*) and on the left Ndagiwe, daughter of Rufu who lives at Kaseke. She is a priestess descended from the first priest in Uha to acknowledge the first Mwami. Then comes Milisano of the Mulanka clan, the priest who lives at Mwanga. He takes the right hand of the Mwami and passes it to Lugwe saying: 'You are the right hand, the *Bulio*, take the right hand.'

He then takes the Mwami's left hand and places it in Ndagiwe's, saying:

'You are the left hand, the *Mimmosa*, take it.' Milisano first performed this function for the Mwami Lusimbe 40 years ago. Lugwe then drives the tribal spears into the ground and shouts 'Hear all people, you see the Mwami, his name is Batega.'

The drums are struck, and the Mwami is borne off on the shoulders of his followers, with great rejoicing, to visit all places in his chiefdom, accompanied by M'kalinga. The Wiru women come with wooden containers (*chansis*) of milk, and sprinkle the onlookers with it.

On the spot where the Mwami was proclaimed three sacred fig-trees are planted. Here will dwell the spirit of Imana and that of the Mwami, who is now endowed with the spirit, and thus with the power of Imana. Here too the spirits of the subject Ha have been vested in their alien ruler. By him and through him all supernatural powers, good or evil, will henceforth come.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Neolithic Pottery Kilns in the Hebrides. *Summary of a Communication by W. Lindsay Scott, 24th January, 1939.*

The occupation site in Eilean an Tighe in North Uist has produced an immense quantity of pottery, a small amount of stone artifacts, and the remains of kilns in which the pottery was fired. Two of these are sufficiently complete to allow of their method of use being inferred, and the principal purpose of this paper is to discuss this. The kilns were stone-built and of horizontal type, and find their closest British analogues in the abnormal Roman-British kilns found at Farnham, Surrey.

The fire was built on a large flat hearth, more or less effectually enclosed to create a draught. Against the middle of the back of the hearth stood a central

block of stone round each side of which the hot gases were led. From each of the back corners of the hearth there extended walls which opened out to form two ovens, one on each side, and then converged into a narrow flue. Slabs set vertically in the ovens apparently served as baffles to keep the flames out of direct contact with the pots.

The existence of pottery kilns in Western Europe before the Iron Age is a new fact and provides an explanation of the high quality of Hebridean Neolithic wares. These form an interesting sequence from plain pots of simple form with undeveloped rims to vessels of advanced form with developed rims and elaborate decoration covering their whole surface. There is evidence from the mutual relations of the surviving kilns that this sequence was a sequence in time.

REVIEWS.

ARCHÆOLOGY.

Mostagedda and the Tasian Culture. *By Guy Brunton. London: Quaritch, 1937. viii + 163 pp., 84 plates. Price £2 10s.*

The author here records the results of his excavations in Upper Egypt during the two seasons 1927-8 and 1928-9, with his conclusions, tentative or otherwise; he includes a chapter by Dr. G. M. Morant on the skulls of the Badarian period, the Tasian material being insufficient.

Written with the great diligence and modesty which characterizes the author's work, this record is indispensable for the student of early archaeology, casting as

it does one more ray of light into the darkness which surrounds the beginnings of civilization and forming a sequence to the study by Miss Caton-Thompson and himself of the Badarian period. Perhaps one should say 'complement' rather than 'sequence' because, though it seems a fair inference from the evidence that the Tasian culture immediately preceded the Badarian, there are features which lead to some doubt, such as the position of certain graves of Badarian type where Tasian might have been expected. The author propounds quite clearly the points of uncertainty, as, for example, on pp. 5 and 26, pars. 7 and 33 and elsewhere.

The distinguishing features of the culture (p. 32) are the prevalence of polished axes or celts, either home-made of local limestone or of igneous rock, probably traded; flared beakers with incised designs, and certain forms of pottery; palettes, further, were usually of limestone, unlike those of alabaster, schist, etc., common in later times. Some of the features appear in the early Fayum culture revealed by Miss Caton-Thompson and Miss E.W. Gardner (*The Desert Fayum*, pp. 32 and 40), which seems to have been a backwater from the main Egyptian stream, but may be considered, at least tentatively, as roughly contemporary with Tasian as well as with the settlements recently explored by Junker at Merimdeh and Beni Salâmeh, near the head of the Delta. On this point further evidence is required before definite conclusions can be safely posited.

The flint implements, now preserved in the British Museum, have not yet been described by an expert. This, we may hope, will soon be done, and may we further hope that to the account may be added a comparative study of all the classes of prehistoric flint-work, not only of Egypt but of all the Old World. Such a study would be a boon indeed to all students of the history of man. Meanwhile the author has given us two plates of photographic illustrations, together with Badarian examples, which may serve for preliminary study.

Chapter IX contains Dr. Morant's report on Badarian skulls abridged from his article in *Biometrika*; he finds the race mixed, with cephalic index about 72 for males and 73-4 for females. The skulls are generally small and feebly developed, unlike the European paleolithic; they are not far removed from the Early Dynastic but a little farther from the Late; throughout both Predynastic and Dynastic the index number grows continually a little higher with a progressive widening of the calvaria. Some likeness was discovered with modern Dravidians, but this, of course, does not justify conclusions about an ancient Indian connexion: the likeness disappears with time and is wholly lacking in the historical period. There is also more affinity to negro features than in dynastic Egypt, where, indeed, the general type is far removed from the negro. In this connexion it may be noted that the graves yielded evidence of the use by the Tasians of feathers as hair-ornaments and this would seem to denote connexion with the peoples figuring largely in the rock-drawings published by Dr. Hans Winkler in his *Völker und Völkerbewegungen und Rock-drawings of Southern Upper Egypt, I* (London, 1938), who may be of Libyan stock; Dr. Winkler connects them (*Rock-drawings*, p. 20) with the type of ship with high extremities which Professor Frankfort has shown in his *Studies of Early Pottery* (I, 38-44) to derive from Mesopotamia. We thus reach the question of foreign relations and trade with which Frankfort has also dealt and certain further details have been added by the reviewer in the *Journal of Egyptian Archaeology* (XIII, pp. 240 ff.—“Some Predynastic Carvings”).

Exploration in the graves has so far produced no direct material evidence of foreign trade in the Tasian age, but if the Fayum culture is accepted as contemporary, the existence of it is proved by the presence of remains of birch-wood which must probably have come from the Armenian or Cappadocian highlands, though some authorities suggest the countries bordering the northern Mediterranean (*Desert Fayum*, pp. 188 and 122—birch-bark has been found in tombs of the fourth and eighteenth dynasties). For the Amratian age an important piece of evidence was found in a sherd of that period on which was depicted a ship of the Mesopotamian

type, which is thus proved to have been known in Egypt at a much earlier date than has hitherto been ascertained. Other examples are found among the rock-drawings recorded by Dr. Winkler, together with pictures of the usual Nile boats which figure on decorated jars of the Gerzean age; he concludes, in an Appendix in *Rock-drawings*, that the type identified by Frankfort as Mesopotamian really belonged to neither Egypt nor Mesopotamia, but to a sea-going people who acted as intermediaries between them, but he can offer no suggestion as to the identity of these mysterious people (pp. 38 ff.).

It is thus now established that trade with Mesopotamia was maintained at least as early as the Amratian age; the evidence for the Gerzean and early dynastic has been already mentioned and for the Middle Kingdom we may point to the cylinder-seals of Mesopotamian merchants who had established themselves, it would seem, in Egypt since one of them, about 2000 B.C., took for his personal god the Memphian Sakkur, as recorded by Mr. Sidney Smith in the *Journal of Egyptian Archaeology*, VIII (1922), pp. 207 ff., and Pl. XXIII: the seals are now in the British Museum.

In all this we have evidence of relations on the material side reaching back to the oldest known times. On the cultural side the matter goes deeper; the Osirian rites analyzed by the reviewer in MAN, October and November, 1937, go far to show that ancient Egypt and the adjacent regions about the eastern Mediterranean and the Two Rivers held in common a special form of fertility-religion centring on Mother, Consort, and Son, a cultural feature of great significance. Further implications are doubtless to be found in the carvings on the famous knife-handle from Gebel el Araq, now in the Louvre, which first brought into publicity the Egypto-Mesopotamian connexion.

To return to the material, an interesting discovery was that of tree-roots, which were found throughout the excavated area, sometimes at a considerable distance from the present boundary of cultivation and often well below the present desert surface. The author postulates a better water supply from either the Nile or a greater rainfall than the present. Questions of climate, of the last Pluvial Period and its final end, and of encroachment by the desert, here arise; the conditions now discovered may perhaps offer some assistance towards their solution. A park-like land is indicated by the giraffes and elephants found in some of the rock-drawings published by Dr. Winkler, connected by him with people whom he describes as ‘Early Hunters,’ but their age is quite unknown and may be much earlier than the Tasian; further, the identification of the remains is not quite certain, owing to their condition; they may be of acacia or tamarisk, both of which are common in Egypt, but, as all the wood found used was tamarisk, the roots are probably the same. Both these trees stand drought and dryness well, but the tamarisk exceptionally so, and it is possible that these roots do not really indicate a great, or even a considerable, change of climate.

The existence of Tasian agriculture is proved by granaries, pounders, etc., and by actual grains of both barley and emmer (pars. 41 and 43). Basketry was known but no indication of actual weaving was found, although it has been in the Fayum settlements which are supposedly contemporary and in which were also found, brought from afar, such valued hard stones as amazonite and turquoise, unknown as yet in the Tasian though found in the Badarian. The latter at least, and the people of Fayum, must have had a well settled civilization, with a stable agricultural and pastoral background, though hunting doubtless provided a

valuable complement to their means of living. The Egyptian, in fact, with his home manufactures, his foreign trade and indulgence in exotic articles, was making a sure advance in luxury—well attested, besides, by such objects as the ivory spoons of the Badarians, recorded in *Badarian Civilization*, and we begin to wonder how

far back in human history does civilization reach, with its probable beginnings in systematic agriculture. This book, at least, with cognate works by the author and Miss Caton-Thompson on Badari and the Fayum, has materially advanced our knowledge in that direction.

G. D. HORNBLOWER.

INDIA.

Hindu Customs and their Origins. By Stanley Rice; with a Foreword by H.H. the Maharajah Gaekwar of Baroda. London: Allen & Unwin. 1937. 219 pp. Price 7s. 6d.

In 1929 Mr. Stanley Rice published in the *Asiatic Review* two very important articles on the origin of caste in India. The present volume contains an expansion into five chapters of the theory then put forward, together with half a dozen other articles, five of which deal with other aspects of Hinduism, while one forms a general introduction on the differences of national character in the East and in the West, and the causes to which this difference is to be ascribed. For East and West Mr. Rice would substitute North and South; even so, however, his theme does not work out quite satisfactorily, as climate is dependent on many factors other than latitude, and in this article he is inclined to ignore prehistoric movements of peoples. His facts are occasionally faulty, as when he speaks of Urdu as a language belonging to the Semitic or Arabic group; the Urdu script may be Arabic and its vocabulary contain Arabic words, but the form of the language is unquestionably Indo-European and akin to Sanskrit. Again, he puts down the date of the invasion of the Rig-Vedic Aryans as 2500 B.C.—i.e., 1,000 years earlier than the generally accepted and most probable date for the penetration of the Wiro tribes into India itself. His explanation of the origin of child marriage is difficult to follow and unconvincing, though his explanation of the Indian opposition to its abolition is perfectly just and sound. And this contrast is typical of the whole book, which contains much excellent material—e.g., a brief and lucid exposition of esoteric Hinduism and an admirable account of some Maratha customs (by the way, is not Maharashtra more likely to be named after the Mahars than the Marathas?), set forth with little knowledge of anthropology and an obvious ignorance of the work of such authorities as Ramaprasad Chanda and B. S. Guha. The census report of 1931 seemed to have escaped the author's notice entirely. Were it not so he would hardly have described the brachycephalic Maratha stock as derived from a strain in the main "aboriginal, modified by a Dravidian admixture and possibly by Scythian, but with very little "Aryan influence." Whatever the brachycephalic element in West India may be, it is not aboriginal; probably it is to be traced to an invasion from Iran which preceded that of the Rig-Veda, perhaps by 1,000 years but which may have brought to India the "outer band" of Indo-Aryan languages. It is such an invasion which may similarly account for the brachycephals of Bengals and for the Vratyas, who may have migrated from Iran after contact with, or under pressure from, the ancestors of the subsequent Rig-Vedic immigrants, and perhaps had already "Aryan" leaders. The difference in culture between these brachycephalic immigrants and their dolichocephalic successors may account for the contrast between Hinduism of the Upanishads and that of the Vedas, on which contrast Mr. Rice has an important chapter. It would have been perfectly natural for the Rig-Vedic immigrants of pure Wiro blood to have regarded with some distrust or aversion

a people speaking a kindred language and having some common customs and traditions, but whose culture was in the main derived from a very different, even though a more advanced, source. The early history of Mesopotamia and of Asia Minor would probably afford a number of instances in which a people first received Indo-European rulers from the north and was later overwhelmed by a mass movement from the same direction.

Mr. Rice is probably quite sound in general as to the origin of caste, and was indeed the first to adopt the view which he very justly holds; but while ascribing taboo to the aborigines, i.e., pre-Dravidians, proto-Australoids, or whatever name one gives to a familiar and widespread type in India, he ascribes totemism to the "Dravidians," that is, to the civilized immigrants of Mediterranean affinities who preponderate among the higher castes in South India and are probably the generally prevailing physical type throughout the peninsula.

He might have pointed out, it is true, that even some of the Rishis seem to have quasi-totemistic origins, but totemism is most typical of the Australian tribes, and most of the survivals of totemism in India are among the more primitive communities.

It is time that responsible writers of Mr. Rice's calibre gave up relying on the supposition that the "Aryans" were superior in civilization to the pre-existing inhabitants, and on such discredited anthropological hypotheses as the automatic succession of the hunting and pastoral stages of development. Anyhow, fertility cults are typical of agricultural rather than of pastoral peoples, whatever importance the latter may attach to bulls.

An uneven, but interesting and suggestive, volume.

J. H. HUTTON.

The Rengma Nagas. By J. P. Mills. Published by direction of the Government of Assam. London: Macmillan, 1937. Pp. x + 381, 17 plates. Price 25s.

Mr. Mills is the Honorary Director of Ethnography in Assam, and his previous works on the Lhota and Ao Nagas have already obtained for him such a reputation among anthropologists that another monograph by him needs no blurb. Although the Rengma are but a little and a scattered tribe, this monograph is important as consolidating the main block of Naga tribes in the administered part of the Naga Hills District. It is limited to the two branches of the Rengma in that district only, and takes no account of the westernmost branch of that tribe which migrated to the Mikir Hills in the earlier years of the nineteenth century, and the expressions Eastern and Western Rengma are used subject to this reservation.

The differences between the two groups are interesting, and, as Mr. Mills points out, social beliefs and customs which are of great importance differ comparatively little, while beliefs which are of no practical importance, e.g., on the causation of natural phenomena, differ very widely between the two branches of this tribe, though one may suspect that this is partly due to a good deal of

difference in blood as well as to separation in space. Not everyone, by any means, would agree with Mr. Mills' statement that "the Eastern Rengmas exactly resemble the Western parent stock." Personally, I should have said that the latter contain a very much higher proportion of coarse features, with a broad nose and everted lips, seen more particularly in the male. Even between the two eastern villages of Sahunyu and Meluri, the physical type is generally distinct enough to make it possible to recognize men of the former with a fair degree of accuracy. It is perhaps worth recording here that almost half of the village of Kizare, excluded from the list on p. 47 but mentioned in another connexion on p. 69, are of Eastern Rengma origin.

Mr. Mills' present monograph is lavish of the more intimate details of daily life and ritual and contains more than most volumes of this series in regard to dreams, to stones and to magic as practised, for instance, in love charms, and it is interesting to note that magical arts are handed down from mother to daughter just as they are among the Eastern Angami. Terms of relationship are dealt with in detail and have been clearly much influenced and to some extent confused by the fact that the Rengma, or, at any rate, the Western Rengma, are undoubtedly of mixed origin; consequently the exact significance of the use of the same word for the children of a father's sister's child, a sister's child and a grandchild, is a little difficult to evaluate, but it may be noticed that the Thado Kuki agree with the Rengma in using the same term for all these three. A change in the use of terms of relationship has clearly taken place, as different terms are used for 'mother' and 'grandmother' if a man's eyes are sore. As soreness of the eyes is regarded by all Nagas as an evil that follows almost automatically on some act that infringes the principles of loyalty to one's clan or family, it would seem that the mother and grandmother are regarded as strictly entitled to be addressed by terms other than those in everyday use, which have probably been introduced by elements from another tribe. The Rengma practise the levirate, and Mr. Mills remarks that "there are definite signs of an old institution by which a married woman, if she agreed, was at the disposal of all the clansmen of her husband." My own experience does not quite tally with this, as I found the Rengma admitted the right of the younger brother to have access to his elder brother's wife, but no right of access for the elder brother to the wife of the younger.

The raw hide armour described and depicted is almost identical with that still in use by the trans-frontier Sema and the Yimtsungr, and is less elaborate than the Konyak and Kuki types. Mr. Mills states in a footnote (p. 41) that "no Konyak set is to be found now." Possibly not in the Konyak country, but there are one or two in museums.

An interesting point is raised in the practice of offering the dead taro, but not rice, because to offer rice to the dead would draw away supplies of this staple crop from the living. Mr. Mills suggests that the real reason is that taro was the staple diet before rice was introduced. That is extremely probable, and rice is even now of comparatively recent introduction in some transfrontier areas. What one would like to know is where millet stands in regard to taro and to the dead. Is it offered to them? Possibly it is older even than taro, for it is clearly a very ancient staple from Formosa to South India, where it is the sowing of millet which coincides with the Dasehra festival so often associated with the taking of human life.

An excellent account of rain-making is given, but there is one Rengma ceremony that might have been

added, which consists of digging and filling with water a pool on the grave of a great man recently deceased. One or two small errors call for correction. The piston bellows are rightly stated (p. 70n) to occur in Madagascar, but surely not in Polynesia? Probably Indonesia is intended. Again, the 'millet,' of which the reddish leaves keep away wild pig and which is called *akhū* by the Rengma, is, I think, not really a millet at all but *Chenopodium murale*. Minor inaccuracies, if such they are, of this sort, only serve, however, to emphasize the high level of excellence generally maintained throughout. The index is worthy of the text, the illustrations are plentiful and good, but it is unfortunate that no map is included, particularly in view of the fact that the tribe is separated into three groups, and that the Rengma names for their own villages, rightly used throughout by Mr. Mills, are likely to prove unfamiliar to some accustomed to other forms.

The publication of this book leaves all social anthropologists under yet another debt to Mr. Mills and to the enlightened Government which he serves.

J. H. HUTTON.

A Tribe in Transition. By D. N. Majumdar. London: Longmans, 1937. xi + 209 pp. Price 10s. 6d.

26 Studies of the contact of European civilization with simpler cultures have been developed furthest in Africa and the Pacific. America has produced one or two accounts of the reaction of Indian tribes to modern conditions; but from India material has so far been lacking. Yet data from a region where the influences introduced by a European administration have been at work so long should be of the greatest value for comparative purposes. Dr. Majumdar's study of the Hos of the Chota Nagpur plateau will therefore be of interest to a wider circle of readers than the specialists in Indian culture.

The Hos came under direct administration by the East India Company in 1836; the author does not give us the dates when specific influences such as the activity of Christian missions, the demand for labour, or the introduction of schools, began to affect them. The developments which he mentions are similar to those that have appeared in the same circumstances in other parts of the world; tribal authorities, whose position no longer depends on public opinion, tend to become oppressive and to indulge in corruption for the sake of 'the higher standard of living which they have adopted, and their constant association with people whom they cannot afford to imitate, together with the expenses which they have to incur to maintain their position as leaders of the tribe.' The implications of a money economy have been only partially assimilated; subsistence is still obtained directly and wage-labour undertaken when money is required for some specific purpose. An interesting fact, which the author mentions in passing, is that women, in preference to men, are sent from the village to the labour centres. Education gives no training of any value except to those who are to hold authority in the village. Government control of the forests makes hunting impossible, and this, along with the adoption of the food restrictions observed by neighbouring Hindus, has unduly curtailed the range of articles of diet. Striking differences in the reaction to Christianity of the Hos and their neighbours are ascribed to differences in land tenure; Christianity has been popular where the missions were a source of protection against exorbitant landlords.

As a contribution from a new field to the study of culture contact this volume is of interest. But the expectation of a beneficial discussion raised by its subtitle 'A Study in Culture Pattern' is disappointing.

L. P. MAIR.

Himalayan Village. By Geoffrey Gorer. Michael Joseph, 1938. 510 pp. Price 25s.

27 This lengthy volume describing the Lepchas of Lingthem, among whom the writer spent some months in 1937, having previously acquired a working knowledge of their language, inaugurates a new departure in the ethnographic survey of India. It is remarkable for some entirely new features. The author professes to find in the lengthy period for which children are kept under physical restraint a Freudian explanation of the lack of aggressive impulses among the adults. Whatever the cause, this lack of aggression must have stood him in good stead, for he appears to have pursued his enquiries into the sexual life of individuals, both male and female, with such pertinacity that in other parts of India trouble must undoubtedly have ensued. It is open to question whether quite such freedom of description is either essential or desirable in a work of this nature. It is to be hoped that it will not be taken as a precedent by other enquirers into tribal customs in India.

Subject to this criticism, the work is one of great interest and value. Professor Hutton, in an interesting introduction, pays tribute to the "feast of information" that it contains.

Starting from a description of the Lepcha homes, the author describes the methods of food raising, relations with moneylenders and trading friends, the preservation of law and order, rules of kinship and marriage, religion, which includes both Lamaism and an early form based on spirit possession and spirit scaring, and then gives a detailed account of their birth, childhood, marriage, and death. Vital statistics, horoscopes, totems and folk tales in the vernacular are to be found in the appendices.

In dealing with religion, the writer finds a parallel to the spirit-scaring rites of the Lepchas in the modern European attitude towards germs and vitamins. "People say there are fewer devils here now that we have the lamas and their books, rather as they might say there is less diphtheria here now that we have got the new drainage system." One is inclined to wonder whether the author would view with favour the arrival of a spirit-scaring expert in Harley Street. It would certainly be an interesting experiment.

We are told by the author that Lepchas possess remarkably vivid and exact verbal and visual memories. Intellectual quickness is not on the whole one of their characteristics. A striking deficiency in their characters is that numbers are practically meaningless to them. To any question demanding numbers they will give three or four different answers. A Lepcha cannot count the number of inmates of his own house.

It is not desirable to reproduce here the very detailed account that the author gives of Lepchas' behaviour in sexual matters from their earliest youth to advanced old age. The privileges of younger brothers under the levirate succession can be freely exercised during the elder brother's lifetime. The rite of betrothal (*asek*) seems to be consistent with no little irregularity, both before and after.

In his final chapter, which Dr. Hutton would have liked to see as a prelude rather than as a conclusion to this valuable work, the author deals with certain aspects of anthropological work up to 1914, of which he seems rather critical, though he is generous enough to admit that he would not be understood to suggest that all the anthropological work done before 1914 was useless. The distinguished author of the *Golden Bough* will no doubt be grateful for this concession. It is to be hoped that Mr. Gorer may be encouraged, by the reception given to the fruits of his research while resident at Lingthem, to pursue his studies by approaching other

Indian tribes of a primitive description. Readers will be grateful for the materials offered, even if they would welcome greater restraint in presentation, and may be disposed to reject some of his theories.

R. E. ENTHOVEN.

The Maria Gonds of Bastar. By W. V. Grigson, I.C.S. Oxford University Press, 1938. xxi + 350 pp. Price 30s.

28 After some thirty-five years or more from its conception by the late Sir Herbert Risley, the Ethnographic Survey of India continues to yield valuable fruit; and this latest contribution to a systematic study of tribes and castes, by the Deputy Commissioner of Jubbulpore in the Central Provinces, is entitled to a cordial reception from students of India's vastly complex population.

A short introduction is supplied by Professor Hutton, who invites attention to the fact that the author of this work has succeeded in initiating measures to restore the jurisdiction of village *panchayats*, to restrict the alienation of land to foreigners, and generally to improve the lot of these very primitive people. Professor Hutton also gives some interesting conclusions regarding the various racial elements that have been detected in the Gonds. The author, in his preface, explains his method of recording observations, which are the result of first-hand questioning of the people, and which are remarkably detailed in spite of the apparent difficulty of language.

It will be remembered that some very valuable notes on the Gonds are to be found in Russell's *Tribes and Castes of the Central Provinces*—a work to which, perhaps, scarcely adequate justice is done in the pages of this volume. Mr. Grigson points out the ample scope for further investigation of the unexplored portions of Bastar and Jeypore. It is to be hoped that his hint in this connexion will not pass unnoticed.

The following chapters, which are amply illustrated, deal with the historical, geographical and ethnographical setting of the Marias, their personal appearance, ornaments, weapons, tools, housing, agriculture, diet, domestic life, religion, magic and social organization. Doubts are expressed whether the reputed practice of human sacrifices known as *Meriah* ever really existed; and the evidence seems certainly to throw much doubt on a well-established tradition.

The Gonds of Bastar consist mainly of Murias, Marias and Koyas, the Marias being divided into Hill Marias and Bison-horn Marias. Some confusion seems to have been made in census-taking between Koyas and Bison-horn Marias, which renders an accurate survey of the population difficult.

We must leave it to the reader to study the lengthy but never wearisome details of these primitive people in Mr. Grigson's interesting pages. He will find how (p. 129) the ordinary Hindu lunar months have been renamed, how (p. 189) an elaborate terminology exists for all the different periods of the day, commencing with *Kache Kusānā*, when the King-crow calls at 3 a.m., to *phul-sundri*, when the flowers shed their fragrance, and *bhainsa-andhyar*, or buffalo-darkness. The Earth or *Bhudevi* is the god of nourishment, of reproduction, and of life itself. This earth-goddess is represented by the *saja* tree (*Terminalia tomentosa*), or at least by a cairn of stones below it; a clan god is made of logs cut from this tree.

Ancestor worship (*hanal*) is widespread. There is not, it is recorded, a single Maria who does not believe that for some time, at least, after their death the departed are to be feared, and to be appeased by the necessary offerings and memorials. Later a spirit may become

a guardian, as we have learnt from many previous observers of early tribes. Magic and witchcraft, with all the now familiar ritual, prevails and is of widespread occurrence. Persons suspected of witchcraft are thrown into water tied in sacks, and any struggle on the part of the victim is held to be proof of his ill-deeds. The social organization is peculiarly elaborate. In some respects it recalls that of the Australian bushmen. Phratries of several descriptions exist, and totemism occurs in many divisions among the Murias and Bison-horn Murias (p. 239).

In appendices, information is given of the Bastar population statistics, the clans, totems and habitat of the numerous divisions, the terms of relationship, and some anthropometrical records. A note on the Maria language follows. Here we must leave this work. Great credit is due to the writer for his careful and thorough treatment of the subject, his excellent illustrations, and for the substantial addition that he thus offers to the existing records of Indian tribal and caste practices.

R. E. ENTHOVEN.

AUSTRALIA.

Studies in Australian Linguistics. Edited by A. P. Elkin (*The Oceania Monographs No. 3*). Australian National Research Council. 1938. 173 pp. Price 7s. 6d.

Some of these articles have already been published in *Oceania* VIII. They are signs of increasing interest in the aboriginal languages of Australia, and are designed to clear the way for further intensive study. In his opening paper the editor gives an account of previous work done by missionaries and others in the far past and suggests reasons for their difficulties. Most of them started with the words of the languages regarded as a medium for Christian teaching and found in them no equivalents to express Christian and Western ideals, because these were absent from native culture. Dr. Elkin lays strong emphasis upon the importance and necessity of approaching the study of the languages through an understanding of the culture of which it is a living part. The second portion of the monograph is by Dr. Capell on 'The Structure of Australian Languages.' He gives a résumé of the main features of the Grammar and thus brings up to date previous summaries in the Australian Encyclopedia and Schmidt *Die Gliederung der Australischen Sprachen*. The later information available to Capell mainly relates to North-west Australia and the remainder of the monograph is devoted to the languages of this region. They are as follows: 1. 'The Languages of the Kimberley Division,' by A. Capell and A. P. Elkin. 2. 'An Outline of Worora Grammar,' by J. R. B. Love. 3. 'Notes on the Languages of East Kimberley,' by Phyllis M. Kabery. 4. 'The Pronoun in Nyobnyol (Nyul-nyul) and related Dialects,' by W. Nekes. 5. 'Onomatopoeia,' and 6. 'Foreign Words, in some Kimberley tribes,' by Ernest Worms.

The Northern Kimberley languages as represented by the Worora are remarkable for the occurrence in them of Noun Classification (sometimes called Grammatical Gender), Incorporation of the Objective Pronoun in the Verb, and an elaborate system of Concorde, as in some languages of Papua and the Solomon Islands. These features are absent in the Nyol-nyol and dialects of South Kimberley, but are apparently found in a restricted form in East Kimberley. The Southern Kimberley, therefore, more closely resemble the general Australian in grammar.

This monograph is full of interesting matter, and should certainly serve its purpose of stimulating closer scientific study of Australian Languages as an essential part of Australian Culture.

S. H. RAY.

Australian Aboriginal Decorative Art. By F. D. McCarthy. Australian Museum, Sydney, 1938. 48 pp.

This brochure gives a brief introduction to the study of primitive art in general, and then reviews the type of ornamentation produced by the Australian aborigines by painting, incising, charring, ground modelling, feather work and reed inlay. Many excellent photographs of weapons, baskets, shields, and ritual objects illustrate the text, and reveal the variety of native designs, both geometric and naturalistic. The frontispiece is a pleasing coloured plate of three sacred paintings on sheets of bark from north-east Arnhem Land. A preface by Professor Elkin draws attention to the fact that the aborigines do possess an aesthetic sense, and emphasizes the way in which this is conditioned by and expressed through their social and ritual life.

R. F.

CORRESPONDENCE.

The Negritos of Malaya. (Cf. MAN, 1927, 61; 1928, 40.)

31 SIR,—In MAN, 1928, 40, there appeared an article by Mr. I. H. N. Evans which purported to be a response to a contribution of mine on the Negritos of Malaya, MAN, 1927, 61. Already once before Mr. Evans had called my attention to the matter in question in a friendly letter. Undoubtedly an answer to the article on my part would have been in place at that time, and would have avoided any further misunderstanding. That Mr. Evans did expect this answer is clear from the remark he makes in his book, *The Negritos of Malaya* (Cambridge, 1937), where he writes reproachfully, "no reply to my paper appeared" (p. 22).

As an excuse I can only say that I was then totally occupied with preparations for my expedition to the Pygmies of Central Africa, and therefore could not devote myself to the Negrito problem sufficiently. Furthermore, I had hoped to treat in detail all the problems raised by him when I came to the final exposition and exhaustive publication of my findings in Malaya.

My first Pygmy expedition (1929-30), however, was followed by a second soon after (1933-34), and the interval between was entirely filled with the compilation and publication of the more important results of my African travels. Thus Mr. Evans' article, *J.R.A.I.*, 1930, p. 115, slipped my notice entirely.

My silence seems to have strengthened Mr. Evans in his opinion that I had purposely ignored the research work of my predecessors in Malaya, particularly his own, and that I had in part claimed discoveries for myself which others had already made before me. The occasion for this view of Mr. Evans (*Negritos of Malaya*, p. 6) was the fact that in my previous publications I passed over the work of my predecessors almost in silence.

Since there are other attacks against me, of a personal nature, in this book of Mr. Evans', which has now, for the first time fallen into my hands, I take this occasion to reply to them.

First of all, a fundamental statement. The fact that I paid little or no attention to the researches of my predecessors in my previous publications is to be

explained either from the nature of my writings, which were directed to a broader public, or to the fact that I offered to the scientific world, for the time being, not a complete detailed account, but merely single findings from my research work. I had found no time for a critical compilation of my research findings and spared it for the final redaction of my material to appear later. This final redaction will exhibit the results of my expedition in the light of a critical comparison with all the sources at hand, just as I began to do recently with the results of my expedition to the Pygmies of Africa. Only then will it become clear to what extent I am dependent on the expeditions of those who preceded me, and what stimulus I received through them. It would indeed be childish consciously to ignore the research work of others among the Negritos before me, or to detract from the importance of their discoveries. That this is far from my intention is clear from the fact that I attempted to stress the importance of Vaughan Stevens and to rehabilitate his name. How indebted I am to Mr. Evans himself for the enlightenment and stimulus he afforded me, upon the occasion of our meeting in Kuala Lumpur, on 19th February, 1924, I can prove from a letter I at that time sent to Europe and which is still at hand. That I shall in due time (in the final redaction of my research material) duly manifest my esteem for Mr. Evans' researches, which contain so much of importance in the field of religion and mythology, is but self-evident. However, he must have a little patience for the time being.

But I should like, here and now, to answer several of his attacks briefly:—

1. Mr. Evans finds it inexcusable that I ascribe to myself the success of discovering the tribal names of the Negritos (MAN, 1928, 40) since other explorers designated such names before me—Vaughan Stevens, Annandale, Robinson, and Evans himself. The tribal names there cited by Mr. Evans, however, make it clear that he misunderstood me. He mentions, for example, the tribal names Pô-Klô, Menik Kaien, Semak Belum, Menik Semnam, etc. These are local denominations of groups, whereas it was my design to divide and designate the tribes as they differ among themselves with regard to language. Others before me could not do that, because they did not make it a point to occupy themselves with the Negrito languages.

2. Mr. Evans gives vent to his sentiments in a sarcastic tone when making mention of my knowledge of the Negrito languages: I am supposed to have mastered several of these languages, yet an observant reader would find it difficult to recognize any such knowledge in my publications. (*The Negritos of Malaya*, p. 283ff.)

The fact is, I only stated that I mastered the Jahai language (in six months) sufficiently to be able to make myself understood, and that I was able, with the aid of the Jahai language, to survey other Negrito idioms from the standpoint of grammar and vocabulary, namely, the Sabuhn, Kênta'-Kênsiu, Mênri, Batek and Tongá-Mqs. I find myself in a position to propose grammatical schemes of all these dialects, as I have done with the Jahai language. (*Bull. of Or. Studies*, IV, iv.) Besides, I now have at hand more or less extensive vocabularies of all these dialects, and hope to publish them in due time. It is to be understood, of course, that each and every misunderstanding cannot be eliminated from my linguistic work. The faults Mr. Evans finds in my Malayan language are to the point, I admit; still, he ought to take into consideration that I have intentionally held fast to the pronunciation of the Negrito.

3. Finally he reproaches me (p. 275) with having extolled myself among the Kênta' at the cost of his reputation, in so far as I styled him "my younger brother," and that in a tribe in which he had "vouched" for me.

First of all I must deny that I learned to know 'Mempelan' in Taiping. I made his first acquaintance in Kupang. Furthermore, I in no way remember having ever styled Mr. Evans 'my brother.' In reference to this I have searched my notes, and have found nothing of the sort. Nor do I know what occasion I could have had to 'put Mr. Evans into a position of inferiority to myself' in the eyes of the Kênta', or to have pretended that he was my 'younger brother,' especially since he was called 'bidog' (elder) there, because of a personal characteristic. Mr. Evans may rest assured that I have neither said nor done anything among the Kênta' nor elsewhere which would bring him into disrepute; neither have the Kênta' done anything of the sort.

I only ask Mr. Evans to have a little patience till I come to the publication of my research work and then critically to compare my work with that of my predecessors. Then he will be satisfied, I hope, to see himself and his work recognized by myself, and not only his work but that of other explorers who preceded me. I hope I have explained sufficiently why I have reserved this work to a later date and devoted my earlier years to expeditions among the Pygmies.

PAUL SCHEBESTA.

Chess in Bornu: Nigeria (cf. MAN, 1934, 48.)

32 SIR,—In MAN, 1934, 48, is an article by Dr. Meek on *Chess in Bornu, Nigeria*. In that article Dr. Meek makes the statement that "the moves were 'the same as our own.'" Recently I showed this article to Mr. G. H. Betts, of the Bank of British West Africa, Minna, who had formerly been stationed in Maiduguri, and who is himself a keen chess-player.

Mr. Betts does not agree that the moves in the Bornu Chess game are the same as our own, and has written to me as follows on the subject:—

"As regards the Bornu game of Chess (*Tsatsarandi*) I should like to make it quite clear that the moves of 'the pieces are not identical with our way of playing the game. The moves of some pieces correspond, but others do not."

"In 1936 I ascertained that there were only two men left alive in Maiduguri, who knew how the game was played, and one of them has since died. The sole survivor was formerly an *Ajia* (headman) of a village east of Dikwa and is now quite an old man. I learnt from him exactly how the pieces moved."

"The King (*Mai*) the Knight (*Fer*), and the Castle (*Kaigamma*) move exactly the same as in our game. The Queen (*Chiroma*) can only move one square at a time and so moves like a King, except that its movement is even more restricted as it may move diagonally only. It has therefore the choice of only four squares for any one move and so, having to remain perpetually on its own colour, cannot threaten the opposing Queen."

"The Bishop (*Bintu*), like our own piece, moves diagonally only, remaining on its own colour; but even when placed on the centre of an unoccupied board, it has only four possible moves and they are the four diagonal squares next but one to itself. If another piece is situated on one of the diagonal squares adjacent to it, the Bishop may 'jump' that piece to reach the next square. The first move in a game, therefore, might be 'King's Bishop to R.3 or Q.3.'

"Pawns (*Gollo*) move as in our game except that the initial double-move is unknown.

"Castling is not played, nor is the 'pawn-en-passant' move. All the details of mating, discovered checks, etc., are the same as played in our game."

I have just received, from the Resident, Bornu, a letter forwarding the following interesting note by Mr. J. T. Adamson, Cadet:—

"*Bornu Chess Game (Tsatsarandi)*.—I made enquiries as to whether there were any exponents of the game now extant. There appear to be only two. One of these is named Abba Bukar, a relative of the Shehu of Bornu, the other is a Village Head in Auno District. The latter is rather in his dotage and is not too sure of the moves of the pieces. The former, however, is very much all there and plays a good game. He is much too good for the Village Head of Auno. I watched several games between these two, and have played about half a dozen games with Abba Bukar myself with varying success.

"The names of the pieces are as follows:—

| English. | Hausa. | Kanuri. |
|----------|----------|-----------------|
| Rook | Waziri | Dala |
| Knight | Ma daiki | Fer or Kaigamma |
| Bishop | Alkali | Bintu or Ligari |
| Queen | Chiroma | Maina |
| King | Sarki | Mai |
| Pawn | Talakawa | Tala or Gollo |

"The King, the Knight, the Rook move as in our game.

"The Queen and the Bishop move as stated by Mr. Betts. However, according to Abba Bukar, the Pawn in its initial move can move either one, two or three squares. This is not in accordance with Mr. Betts, who states that the initial double move of the pawn is unknown. In other respects the pawns move as in our game, except that when the pawn reaches the eighth rank it cannot be promoted to a Queen, Rook, or Bishop, or Knight, as in our game. This greatly diminishes the value of the pawn in the end game. "Castling is not played, nor is the pawn-en-passant move. All the details of mating and discovered checks, &c., are the same as in our game. To inform an opponent that he is in check, the player hisses like the proverbial snake. The rules in our game relating to touching the board before one has decided on one's next move do not seem to apply in Tsatsarandi. "Abba Bukar invariably gained confidence by placing the index finger of his right hand on the square to which he intended to move his piece. When in a tight corner he was not above knocking over a few pieces during this manoeuvre and replacing them in more advantageous positions. He often broke the rule about altering and taking back a move once he had moved his piece. In addition, whenever I was pondering over a move he would wave his hands above the board and chant passages of the Koran to distract my attention. "This is seemingly all in the game, though it would mean his disqualification under our rules. I would describe Tsatsarandi as 'all-in' chess and may the devil take the hindmost."

The Residency, Minna, Nigeria.

P. G. HARRIS.

A Further Note on the 'Mari Lwyd'. (Cf. MAN, 1935, 88.)

33 In MAN, 1935, 88, I discussed the *Mari Lwyd*. Further research has made necessary the elaboration of two points in that paper. In 1935 I wrote: '*Mari Lwyd* customs have survived in Glamorgan to this day and it is wrong to suppose that their absence in

'modern times from other parts of Wales proves their non-existence at all times in north and mid-Wales.' I find that this statement is corroborated by the following quotation from J. Evans: *Letters written during a tour through North Wales in the year 1798* (London, 1804, 3rd edition, p. 403): "Another very singular custom [in North Wales] I never could learn the rationale of, is that of a man on New Year's Day, dressing himself in blankets and other trappings, with a factitious head like a horse, and a party attending him, knocking for admittance, this obtained, he runs about the room with an uncommon frightful noise, which the company quit in real or pretended fright; they soon recover, and by reciting a verse of some ancient cowydd, or, in default, paying a small gratuity, they gain admission. A similar custom is prevalent in the Highlands; (vid. Johnson,) and, from Du Cange, we find it was a practice of Heathenism."

I suggested also that the *Mari Lwyd* probably became associated in medieval times with religious ceremonial, thus acquiring its name *Mari Lwyd* ('Holy Mary'). One or two of my Welsh friends suggested that this explanation was impossible, because the form *Mari* for 'Mary' was unknown in Welsh literature before the Protestant Reformation, the usual Welsh literary form in medieval times being *Mair*. I must confess that I did not see the force of this argument at the time since *Mair* is still the literary form, although *Mari* is the colloquial dialect form, and it seemed to me that in a folk custom of this kind one would be more likely to find the colloquial rather than the literary form. However, Dr. Ifor Williams, F.B.A., University College, Bangor, informs me that the form *Mari* is found in the Black Book of Carmarthen, which is the oldest Welsh manuscript in existence. On page 45, l. 9-10, is found: "Druid eirol Meir *Mari*" and he tells me that the form is also found in the poetry of the Gogynfeirdd, that is, the poets of the early Middle Ages. Unless, therefore, some totally new light is thrown on the origin of the name *Mari Lwyd* it seems to me that there is every reason to suppose that the explanation that it means 'Holy Mary' is correct.

IORWERTH C. PEATE.

The Spiral Amulet. (Cf. MAN, 1938, 46.)

34 SIR.—In MAN, 1938, 46, Mr. Bachatly establishes a "relation between a prehistoric Transcaucasian and a modern Egyptian amulet." Mr. A. J. Arkell; *The double spiral amulet* (Sudan Notes and Records, Vol. XX (1937), pp. 150-155, plate), describes an amulet found in an eroded grave at Uri in Northern Darfur and compares it with similar modern objects worn by an Awlād-Sulimān woman at Fāsher, and on sale in Cairo "as charms for strengthening weakly newborn babies . . . They are tied over the navels of newborn infants who appear to be ailing in any way" (ib., p. 152). Miss W. S. Blackman also published *An Ancient Egyptian Symbol as a Modern Egyptian amulet* in the 'Volume offert à Jean Capart,' explaining p. 91 ff that "in Egypt it is always associated with pre-natal or post-natal life." Mr. Arkell has no doubt that further back all these amulets have a common source which would appear to have been somewhere "in Asia" (l.c., p. 155). The same amulets occur at Tepe Hissar (E. F. Schmidt: *Excavations at Tepe Hissar*. Publ. Univ. Mus., Pennsylvania, 1937, pl. LIV), and in Mesopotamia (Dietrich Opitz: *Altorientalische Gussformen*, Max Oppenheim Festschrift, Berlin, 1933, p. X, 25, and p. 211). Many examples from other places could be added.

S. REICH.

Jerusalem.



1.



3.



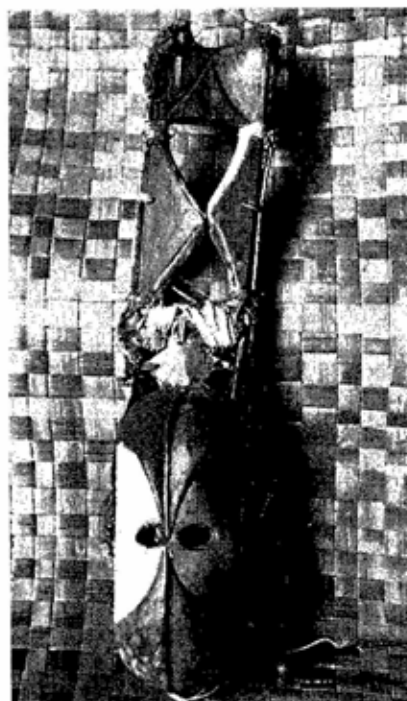
2.



4.

MASKS FROM
SOUTH-EAST
NIGERIA
IN THE
BRITISH
MUSEUM

1. AKPARA OBA
2. AKPARA OBA
3. NWABUGHO
4. AKPAGACHI
5. UFUOCHA
or
IKWUM OCHA



5.

Photographs by courtesy of the Trustees of the British Museum.

MAN

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ORIGINAL ARTICLES.

Nigeria

With Plate C.

Jones

ON THE IDENTITY OF TWO MASKS FROM S.E. NIGERIA IN THE BRITISH MUSEUM.

By G. I. Jones.

35 The two masks illustrated in Plate C. 1, 2 are in the British Museum. The data about them are vague. They are said to come from S.E. Nigeria and to be probably from Ibo. They can without difficulty be identified as Ibo masks. The long, narrow face, the prominent, narrow nose, the protruding mouth, the slit-like eye-holes, the diagonal cheek-scars and the quatre-foil design on their crests are all typically Ibo features. But they have in addition peculiar features of their own—the board-like crest, the absence of ears, and the way in which a narrow belt of woven raffia is attached to the masks. These are all features which occur in the masks of one area of the Ibo country only, namely, that occupied by the Edda (Ada) Afikpo, Unwana, and Nkporo clans of the Afikpo division of the Ogoja province of S.E. Nigeria.

The main types of masks worn in this area are illustrated in Plate C, figs. 1-5, and fig. 6. The human-faced ones are called *akpara oba* or *nwabogho*. They are usually in pairs and are worn by young men, made up as girls, who dance facing each other, and take off the behaviour of young girls admiring themselves. The *nwabogho* masks usually are worn with a band of feathers round them, as in fig. 3.

A second and very striking mask, called *mba* or *ikwuum* (fig. 6), shows how this and other Ada masks are attached to the wearer's face.

A third kind (fig. 4) is called *akpagachi* and is worn in a play called *lugulu*.

A fourth kind (not illustrated) called *isu okwu* is a large, moon-like face, with protuberant cheeks, and circular holes for eyes; it is painted red with white spots. Its wearer, like *akpagachi*, spends most of his time miming and clowning.

A fifth kind, *ufuocha* or *ikwum ocha* (fig. 5), is worn in a special play, made for rich men's funerals.

All these masks are polychrome, painted in black, white, yellow, and red. The black comes from a leaf-dye, the white from gypsum (native chalk), the yellow from a certain wood, and the red from cam-wood.

The plays connected with these masks are only played on the native *orie* day (once every four or eight days) and only during the months of the dry season, November to March. They can only be worn by men who have completed their initiation ceremonies and have attained *mbe* grade. All the masks illustrated, except the *mba* (fig. 6 overleaf), which comes from Nkporo, are from Ngusu Ada, and were made by Ugwu Ocha of Elugu Ngusu, a man of middle age. The *mba* and *ikwum ocha* types of mask are not found in any other part of S.E. Nigeria (nor in any other part of Africa, as far as the writer knows). The other masks, which vary considerably from one clan to another, are fairly typical Ibo masks, and can be paralleled in other parts of the country. White-faced masks, representing young girls admiring themselves, perform in much the same manner amongst the Isu Ama of the Okigwi division. In the Onitsha Awka sub-tribe human faces with horns are one of the most common forms of masks. The masks illustrated in figs. 1, 2, are probably from the Ada clan. They are not like the nkporo nwabogho masks in style and I am told that the unwana and afikpo nwabogho masks are also different to the Ada ones.

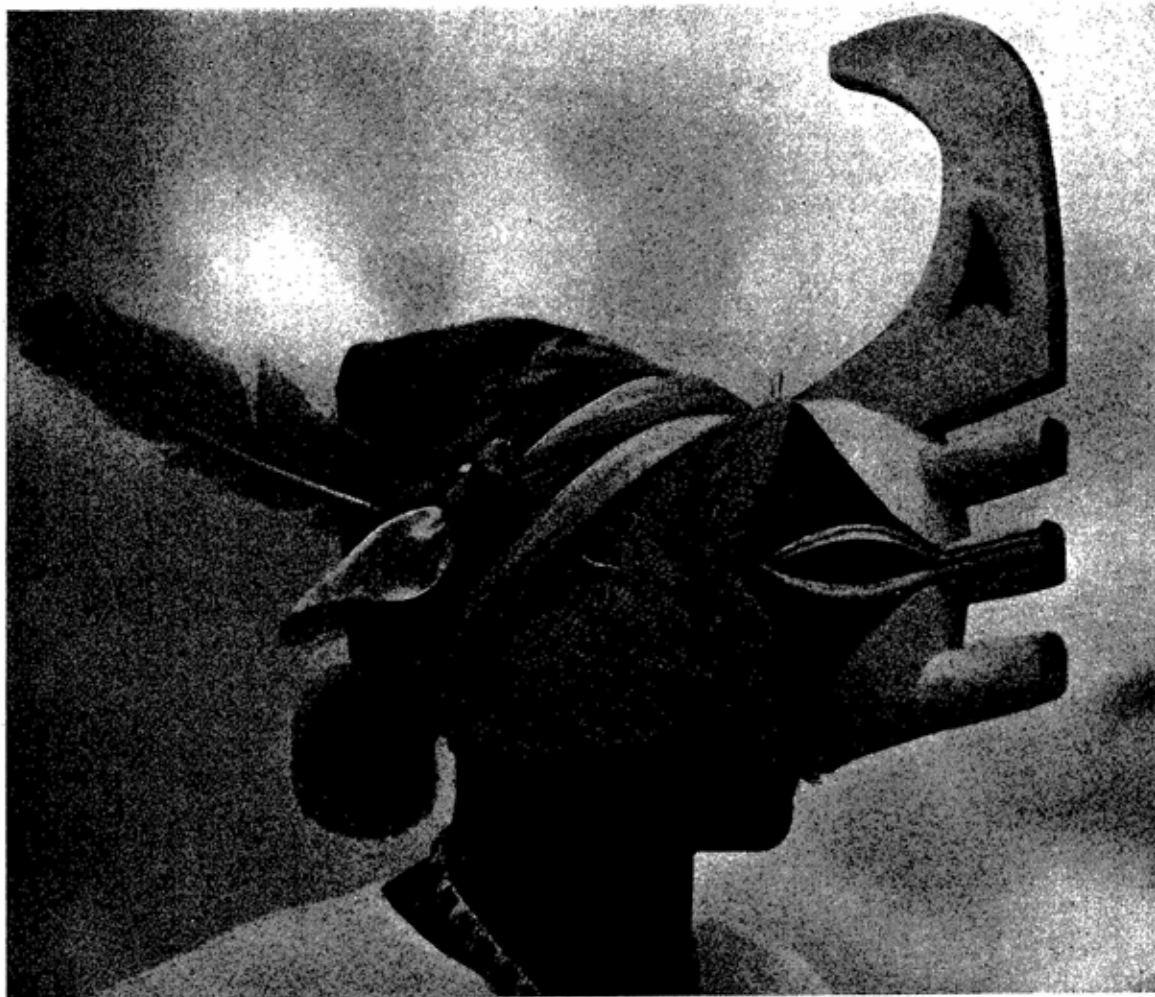


FIG. 6. MBA OR IKWUUM MASK, SHOWING ATTACHMENT TO THE WEARER'S FACE.

THE FIRST CULTIVATION OF WHEAT. A paper read before the International Congress of Anthropology and Ethnology at Copenhagen, 3 August, 1938, by Harold J. E. Peake, M.A., F.S.A.

36 Though no great amount of fresh light has been thrown upon this problem since I wrote on this subject about ten years ago,¹ it seems desirable that I should make a new statement to bring the information up to date.

The species and varieties of wheat have been arranged by Percival² and Vavilov³ into three groups, according to the number of chromosomes that they carry. These are:

A. DINKEL or EINKORN, with 7 chromosomes:

Triticum monococcum L., with its wild form
T. ægilopoides Bal.

B. EMMER, with 14 chromosomes:

Triticum dicoccum Schübl., with its wild forms

T. dicoccoides Körn., *T. durum* Desf.,
T. turgidum L., *T. polonicum* L., *T. pyrami-*
dale Perc., *T. orientale* Perc. and *T. persicum*
Vav.

C. BREAD WHEATS, with 21 chromosomes:

Triticum vulgare Vill., *T. compactum* Host.,
T. sphærococcum Perc. and *T. Spelta* L.

Triticum ægilopoides Bal. has been found growing wild in North Syria, almost all over Asia Minor and Transcaucasia, in most parts of the Balkan peninsula that drain into the Ægean Sea, and in the Crimea. Its cultivated form, *T. monococcum* L., is grown in scattered localities in mountainous districts in Europe, chiefly in

France, Spain, Switzerland, the Balkans and the Crimea; it is also grown in Asia Minor.⁴

Triticum dicoccoides Körn. has been found growing wild in South Syria, in parts of Palestine, especially in Transjordan, and as far south as the mountains on the east of the Dead Sea⁵; it has more recently been found on the hill sides around Erivan in Armenia.⁶ *T. dicoccum* Schübl. is cultivated to-day only by primitive peoples who cling to their old customs and traditions.⁷ The other members of this group, except the last on the list, are cultivated in North Africa, from Egypt to Abyssinia in the south and to Morocco in the west. *T. persicum* Vav., however, which is not in fact grown in Persia, is cultivated in some of the mountainous districts of Transcaucasia, Georgia and Armenia.⁸

In 1910 Theodore Strauss collected specimens of *T. dicoccoides* Körn. in the mountainous region of Western Persia near Kerind, between Kermanshah and Bagdad.⁹ Percival thought that this was a stray plant of *T. dicoccum* Schübl., but it seems possible that the area of the wild *emmer* may once have extended into this part of Persia.

No 'Bread Wheat' has been found growing wild, and the origin of this group has given rise to no little discussion. These wheats are now cultivated all over the world except in the tropics and polar regions, but the more primitive forms are grown in Persia, Afghanistan, mountainous Bokhara, West India and Kashmir.

Percival has suggested that *T. vulgare* Vill. is a hybrid, the result of crossing *T. dicoccoides* Körn. with one or two species of *Aegilops*—as he believes, *Æ. cylindrica* Host. or *Æ. ovata* L.¹⁰ The hybrid origin of *T. vulgare* Vill. has been generally accepted, but its parentage has been questioned. Ruggles Gates at one time suggested that it had been derived from *emmer* and *einkorn*,¹¹ but he has since withdrawn the suggestion. Oehler¹² has cited a number of cases in which *Æ. ovata* L. has been crossed with wheats, both wild and cultivated, of groups A and B. In all these cases, except one, the resultant hybrids have 28 chromosomes, instead of the 21 usual in the 'bread wheats.' The one exception was a cross that he had made himself in 1934 between *Æ. caudata* L. and *T. dicoccum* Schübl. This, however, did not turn out to be *T. vulgare* Vill. or any other known form of 'bread wheat.' Most of such hybrids are sterile. The case of *Æ. cylindrica* Host. is still

more difficult, since it has 14 chromosomes and the *Aegilops* parent should have had 7.

Dr. Aase¹³ has suggested that at a very early date *T. aegilopoides* Bal. crossed with some kindred grass, also with 7 chromosomes, and produced *T. dicoccoides* Körn.; and that, a long time afterwards, the latter crossed with some other grass with 7 chromosomes, thus producing one of the 'bread wheats' with 21 chromosomes. This seems probable, and it is likely that the first of these hybrids was either *T. compactum* Host. or *T. sphaerococcum* Perc., both of which were cultivated at an early date.

Vavilov has put forward the view that the original centre in which wheat was first cultivated can best be determined by noting the regions in which the greatest 'varietal diversity' of the cultivated forms is found to-day. From this he argues that the 'bread wheats' were first grown in the mountainous districts of South-eastern and North-eastern Afghanistan near the South-western Himalaya, that *emmer* was first cultivated in Abyssinia and *einkorn* in Asia Minor.¹⁴ This view was not accepted by Stapf, nor has Percival given it his approval. The theory presents, too, serious difficulties to the prehistorian. It seems impossible to believe that the cultivation of three distinct species of wheat arose in three far-distant areas, in two of which there is no evidence that the plant grew wild, nor have any signs been found of early civilization. Moreover, a simpler explanation can be found, and one more in accordance with the archaeological data.

Watkins¹⁵ believes that "the general truth of Vavilov's contention must be granted, but it must be admitted that the present centre of diversity may not quite coincide, perhaps, with the centre of origin." Now Vavilov begins by stating that all the *emmers*, except *T. persicum* Vav., have their maximum diversity round the coasts of the Mediterranean and in Abyssinia. Wild *emmer* is still to be found growing in South Syria and Palestine, which are in this larger region. Again, the area in which wild *einkorn* is found stretches from Asia Minor into North Syria, where it overlaps the area of wild *emmer*. Lastly, the 'bread wheats' are most diverse in Persia, Afghanistan, the mountainous regions of Bokhara, West India and Kashmir. As we have seen, Strauss claimed to have found wild *emmer* in the Kurdish hills, while Herzfeld has found

extensive remains of an early settled civilization on the mountain sides around Teheran.

The evidence available, both botanical and archaeological, can best be interpreted by supposing that the first cultivation of wheat was the growing of wild *emmer* either in South Syria or in Palestine. In favour of the latter area we may note that flint sickles have been found there, associated with the mesolithic culture known as Natufian¹; these were probably used to cut grass or to reap wild grain-bearing plants. Thence the culture of *emmer* spread southwards to Africa, while the cultivation of grain was adopted in North Syria, where wild *einkorn* is plentiful. Here, from the Mediterranean to the banks of the Tigris, a primitive agricultural civilization has been found, known as the Tall-Halaf culture.¹⁷ *Emmer* may well have been cultivated in this region as it certainly was somewhat later in Mesopotamia, for a pot found at Jemdet Nasr contained grain, identified by Percival as *T. turgidum* L.¹⁸

If we accept the discovery of wild *emmer* on the Zagros mountains, claimed by Strauss, we must suppose that it was somewhere between there and Teheran that there arose the hybrid with 21 chromosomes, some form of 'bread wheat,' probably *T. compactum* Host. In this area Herzfeld has found a neolithic civilization, and this, since it contained settled villages, must have been due to grain-growers. This is closely allied to the agricultural cultures of Susa I and Al 'Ubaid, which may well have been cultivating this form of 'bread wheat.'

Since the above was written I have seen a recent paper by Bhatia,¹⁹ in which the author, from different evidence, arrives at a conclusion almost identical with that advocated in this paper.

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THE STRUCTURE AND ORIGIN OF THE MINOAN BODY-SHIELD. By Professor John L. Myres, F.B.A., New College, Oxford. Illustrated.

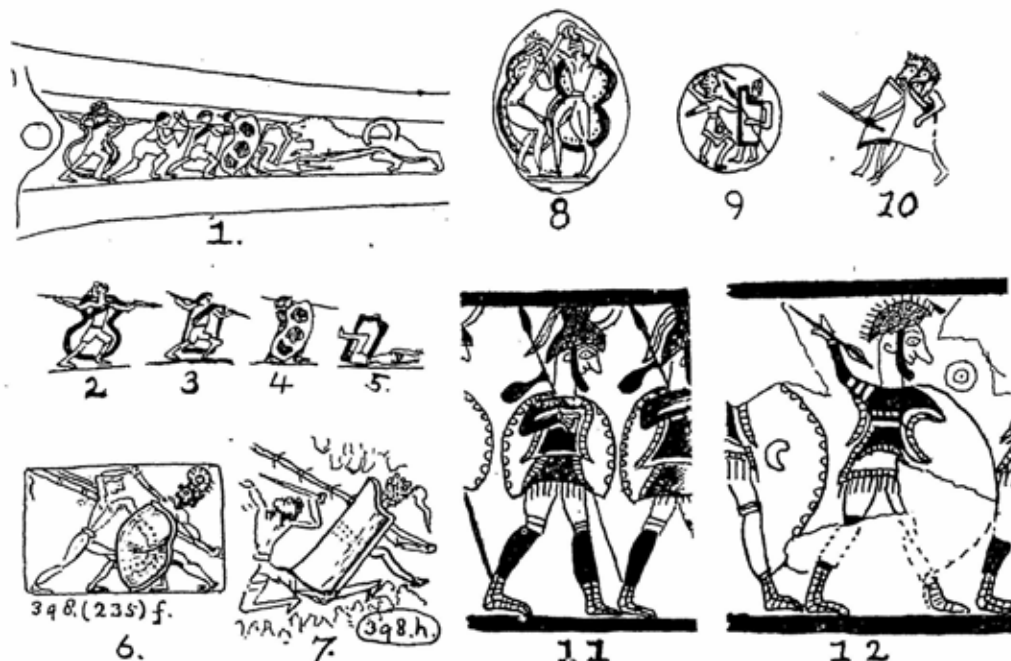
37 The peculiar shields represented on seal-stones and other works of art, of the Middle Minoan and Late Minoan phases of Ægean Bronze Age culture, have been repeatedly discussed, and variously interpreted, especially since they were claimed by Wolfgang Reichel (*Homerische Waffen* 1894¹, 1901²) as the type of shield intended to be

described in the Homeric Poems. It is not the purpose of this note to discuss that identification; only to determine, so far as is possible, on strictly archaeological evidence, the construction of this kind of shield, and its connexion with certain other types—the shields depicted on the well-known 'Warrior Vase' from Mycenæ, the

'Dipylon-shields' common on Attic vase paintings of the Early Iron Age, and the 'Boeotian-shield,' oval with a pair of deep recesses in the margin, which is represented on monuments and in vase-paintings, and especially on the coins of Thebes and other cities of Boeotia, from the sixth century to the fourth B.C.

as an upright semi-cylinder, beyond which the wearer exposed only his head, feet, and arms.

Both types, commonly known as (a) the 'tower' shield and (b) the 'figure-of-eight' shield, are slung by a strap or baldric over the left shoulder, leaving both hands free to handle a



FIGS. 1-12.—1. The 'Lion-Hunt' inlaid on a bronze dagger: Mycenæ. 2-5. The shield-bearing hunters, separately, from 1. 6. The 'Figure-of-eight' shield in side view: gold bead: Mycenæ. 7. The 'Tower' shield in side-view: gold signet-ring: Mycenæ. 8. Two 'Figure-of-eight' shields, slung behind back, for hand-to-hand combat: sardonyx bead: Mycenæ. Reichel, fig. 5. 9. The 'Tower' shield with notched upper margin: cf. 5: carnelian seal-stone: Crete: Reichel, fig. 12. 10. Two warriors from the silver 'Siege Scene' vase: Mycenæ. 11. Warriors on the march, with shields folded (?): from the 'Warrior Vase,' Mycenæ. 12. Warriors in action, with convex shields on arm: note the handhold within the left-hand shield: from the other side of the 'Warrior Vase,' Mycenæ.

Best known among representations of Minoan shields, and especially interesting because it shows two distinct varieties together, is the 'Lion-Hunt' (fig. 1) inlaid on a bronze dagger blade from the Fourth Shaft-grave at Mycenæ. The lion-hunters carry either (a) a rectangular shield, represented as if flat, with a narrow rim or frame (figs. 3, 5), or (b) a 'figure-of-eight' shaped shield, shown full face (fig. 2) as if flat, but also in profile (fig. 4) buckled so as to envelop the wearer, by drawing together opposite points of the rim about his waist (compare the side view in fig. 6). The rectangular shield also is shown elsewhere in side view (figs. 7, 9)

long thrusting-spear. The shield could thus hang either in front, covering the wearer from neck to ankles, or behind (figs. 2, 8), for greater freedom in close-combat, or to protect him in flight.

The patchy decoration of shield 3 in the 'Lion-Hunt' is recognizable, from painted shields in frescoes at Knossos, as representing ox-hide, with piebald hair left on, like that of the frescoed bull from Tiryns. (Sir Arthur Evans. *The Palace of Minos at Knossos*. III. p. 345. Schliemann. *Tiryns*. pl. xiii.) These shields were, therefore, more or less flexible, and were stiffened round the margin by a metal rim, or reinforcement of leather, affixed with

stitches or (as in fig. 8) by rivets with decorative heads.

As an object essentially constructed of ox-hide was liable to decay (like the leather seams of the worn-out shield, *Odyssey* xxii. 184-6), it is not to be expected that actual examples should have been preserved. But in one of the Shaft-graves were found considerable lengths of the bronze rim of some perishable object, of more than hemispherical cross-section, like the outer cover of a rubber cycle-tyre, corrugated transversely like a flexible hose pipe, and transixed at intervals by bronze nails, point inwards, which had secured the rim to the margin of a sheet of some perishable substance. These have been tentatively described as fragments of wheels; but as they show no signs of wear, I suggest that they are the rim of one or more shields of ox-hide, such as is represented in the 'Lion-Hunt.'

Other representations of the 'figure-of-eight' shield (such as figs. 6, 8) and of the 'tower-shield' (figs. 5, 7, 9, 10) confirm and supplement the evidence of the 'Lion-Hunt'; and models of the 'figure-of-eight' shield, in gold, ivory, and other decorative materials, testify to its vogue both as an instrument of war, and also as the symbol of a protective deity, probably even after it had passed out of military use.

Nothing quite like these Minoan 'body-shields' is known from neighbouring cultures. The *Ancilia* in early Rome, sacred shields symbolic of the war-god, were roughly 8-shaped, but (as Sir Arthur Evans has suggested) if they are connected with Minoan types at all, it is as a loan. (Evans: *Mycenaean Tree and Pillar Cult*, J.H.S. xxi p. (82) 180; *P.M.* II. 53-4.) The shield symbol of the goddess Neith seems to have been of flexible leather, of long oval outline, slightly constricted, but as it is represented on a shaft it was more probably of the East African type described below; and the only African illustration of such a shield in use, (O. Bates, *The Eastern Libyans*, p. 148, fig. 60); Evans, *P.M.* II. 51, fig. 27e shows it brandished in one hand. In historical Egypt, the customary shield was of ox-hide, rectangular below but often rounded above; it was apparently flat, and of much smaller dimensions than the Minoan; it was carried on the left

side, but whether by a sling, or a hand-hold, is not clear from the pictures. As there is no indication of nails, rivets, or rim, this shield may have been of board or basketry, bound over with hide.

On a fragmentary vase of silver from Shaft Grave IV. (Reichel, fig. 17), fighting-men in the well-known 'Siege Scene' wear a loose body-protection, slung over their right shoulder, and hanging foldless to the knee. This may be a mere blanket, but has been thought to represent a very primitive body-shield. As the nearer man holds his spear in his left hand, the suspension from the right shoulder may be the craftsman's mistake. But it was certainly from some such elementary wrapping, slung so as to leave both arms free—and not from a parrying shield like that of Egypt—that the peculiar Minoan body-shields were elaborated; quite early, as an Early Minoan bead-seal shows (Evans. *P.M.* II. p. 52, fig. 25 a b)

This elaboration was in two directions. In both, the ox-hide remained more or less stiff, but was never quite rigid; both were habitually slung over the left shoulder, leaving both arms free; and both could be transferred from front to rear, by pressing on the upper margin with the left hand, and thrusting it under the raised right arm. Of both elaborations, the object was additional protection in flank. (a) If the ox-hide was stiff enough, it could be bent permanently into a half cylinder; but in that shape it had to be maintained by a strong rim, to opposite sides of which the ends of the sling were attached; the result was the 'tower-shield' (Figs. 3, 5, 7, 9) standing the full height of the wearer, but often cut away at the two upper corners, so as to allow him either to peer over it, or to hide his head behind the higher centre-screen. But (b), a lighter and more flexible hide, so slung, inevitably buckled with its own suspension-weight, and stresses of handling; and it is at this point that this accidental buckling was utilized, and the 'figure-of-eight' shield emerged, with its peculiar combination of rigidity along the two lines of radial folding, and elasticity elsewhere, increasing towards the originally circular or oval margin. This rigidity was attained without any internal framework, such as was imagined—without any archaeological evidence—by Reichel and Leaf; at most, a light stay or stiffening rod was rivetted or stitched to the leather along the

two lines of fold¹. When the body shield was manipulated in action, it was seized by both hands at these points of suspension and rigidity; and either shifted from side to side, or drawn together to envelop the wearer more completely.

Working model and geometrical analysis.—It is easy to construct a working model of the 'figure-of-eight' shield. Cut out of stiff paper or thin cardboard fig. 13 (overleaf) (according to desired scale and flexibility) a disc, circular or oval; fold it in half, and open out again; then hold it by the two ends of the fold, and bring these toward each other on the outside of the fold, at the same time pressing on the middle point of the fold in the contrary direction. The disc, originally flexible in any direction, forthwith assumes the 'figure-of-eight' shape, which consists essentially of two obtuse cones intersecting along the two halves of the original fold.

The shields on the 'Warrior Vase' from Mycenae.—There is one Minoan painting, of rather later date than the 'Lion-Hunt' and engraved seals, which (I suggest) may show the 'figure-of-eight' shield folded for compact transport on the march, in the same way as our experiment shows that such shields had to be folded before completion. On the well-known 'Warrior Vase' from a later house at Mycenae, outside the 'Circle' which contained the Shaft-graves, there are two lines of armed men. On one side they are in battle, with levelled spears, and large convex shields held high on the left arm; one of these shields has a hand grip on its inner side. These are not 'figure-of-eight' shields, but parrying shields anticipating those of Hellenic times, which are shallower, and usually have a broad flat rim. On the other side are warriors similarly clothed, but with different head-gear and shields. They are newly set out from home, for a woman gazes after them with a gesture of distress. These men are on the march; their spears are 'at the slope,' with a small bag (of provisions?) slung on the shaft. As they are moving to the spectator's

right, their shield is drawn on the far side of their body, with its inner side exposed. It is nearly circular, with a looped or braided binding, which reappears on the inner face of the shield with hand-hold, in the other group. But the margin is slightly concave at its lowest point, and on this part of the shield there are no loops. I suggest that what the draughtsman intended to depict was the 'figure-of-eight' shield, folded along its crease (where there should be no rim), but still slung by its strap. Actually a shield in this position would hang crease-upwards, but it would be crease-downwards if it were carried under the left arm, like a portfolio, the strap taking the weight as before.

It may be conceded that the 'Warrior Vase' is some centuries later than the 'Lion-Hunt' and the warrior-seals, without prejudice to this interpretation; in the same way as a still later date may have to be admitted for the *Iliad* as we have it, without disputing its many precise and graphic phrases, which are in accord with the appearance and handling of Minoan 'body-shields,' both 'tower-shaped' and '8-shaped'; some of which, moreover, are difficult to reconcile with any variety of shield known to the Early Iron Age of Greece.

The 'Boeotian-shield.'—Obviously, if the 'figure-of-eight' shield not only was flexible along its crease-lines, but could be completely folded in two, there must have been some kind of interval in any metal rim; and this was liable to become wider with use. Hence emerged a distinct type of shield, which has a long history because it was adopted by people accustomed to use parrying shields, held in the left hand or carried (with loop and hand-hold) on the left arm. This type, known in its later form as the 'Boeotian-shield,' is represented as early as the finger-ring of gold and blue enamel, from a Late Minoan burial in Ægina (Evans *J.H.S.* XIII. p. 216; *P.M.* II. p. 52, fig. 25*l.*; Marshall, *B.M. Cat. Jewellery*, pl. XIX). On a Late Minoan gold plate from Eleusis (Reichel, fig. 15), these recesses are large, circular, and tangential to the rim, which is continuous outside them; but this representation is decorative and symbolic, not pictorial. But as the interval between the ends of the half-rims became wider, the leather tended to shrink away from them, under stress of suspension; and the whole shield became thereby flexible where rigidity was most needful. It may have been for

¹ In Homeric shields there were two 'straighteners' (*kanones*, *Iliad* viii. 193. xiii 407), but it is disputed whether they were Minoan 'stays' on the transverse handle-bars of a Hellenic buckler (*helbig*). Reichel², p. 19, took them for internal stays to keep the shield in shape, but these, as has been seen above, are superfluous. Hesychius s.v. *kanón* gives, as additional (and probably traditional), explanation, "also the rods of the shield to which the sling was attached" which is exactly (and necessarily) the position of the sling in the 'figure-of-eight' shield, but makes nonsense with the Hellenic.

this reason that this 'Bœotian' type became so early and persistently accommodated to the needs and taste of people in the Early Iron Age, who were using a parrying-shield, which had a 'stretcher' from rim to rim across its greatest diameter. It should be noted, too, that some of the earlier and larger 'figure-of-eight' shields have a spindle-shaped ridge crossing the middle of the transverse crease (presumably to strengthen the centre) (Evans, *P.M.* II. p. 52, fig. 25, c.d.); and that a shield so strengthened (like one with a rigid rim) could not be folded up at all.

The connexion is still obscure between the 'Bœotian-shield' and the 'Dipylon-shield', so called from its frequent representation on the painted vases of the Dipylon cemetery at Athens. In the 'Dipylon-shield' the lateral margins, which are concave, are as extensive as the upper and lower, which are convex. This shield is still slung (like the Minoan) from the shoulder or neck, leaving both hands free, and is found associated both with a circular and with a rectangular shield (Reichel, fig. 25 and references p. 48) similarly slung. Its lateral recesses are often so large that what is left of the shield offers very little protection at all. To retain any rigidity, moreover, this type must have had not only a vertical shaft, but also a transverse 'stretcher' lashed at right angles to each end of it, and drawn towards each other, at their free end (like the framework of a boy's kite), by the shrinkage of the leather between them.

Moreover, in two directions, there are similar types of shield, neither of which has any clear connexion, at all, with the 'Dipylon-shield.' (1) In the Egyptian fresco-painting of the Battle of Kadesh (c. 1280 B.C.) parrying-shields are carried by Hittites or their allies, which have

concave sides and convex top and bottom. But they are represented as if flat, and built of boards or basketry; they are carried in the hand; and they come from a region where there is no evidence for the use of any kind of body-shield, or shield slung from the shoulder. (2) Throughout Eastern Equatorial Africa the great spindle-shaped shields of ox-hide, used by many Bantu peoples, are supported by a wooden shaft to which both ends of the ox-hide are lashed, while it projects beyond them. Though the long tapering edges of the hide remain free and flexible, therefore, they cannot be pulled transversely; the shield is so narrow that it affords no lateral protection; and it is always used as a parrying-shield, and handled by its staff. There is thus no real similarity between these and the 'Dipylon-shields.'

In discussing this whole matter, it is essential to remember two points:—(1) The period even from the earliest Minoan settlements on the Greek mainland to the dawn of classical Greek culture is a long one; as long as the interval between the Augustan Age and that of Charlemagne, or from Charlemagne to Queen Elizabeth. (2) A great part of this long period was tumultuary, with clash of cultures, and especially clash of divers weapons and armour. In such circumstances much depends on individual preference and initiative; different types and fashions co-exist and influence each other. The memory also of individual prowess lives on, and of individual oddities; a great fighter, such as Ajax in Homer, was remembered for his 'tower-like shield,' as Meriones for his helmet of laced boar-tusks. And there is evidence enough among the material remains, scanty as they are, for co-existence of various shields, as on the 'Lion-Hunt' and on the 'Warrior Vase.'

THE SHAPE AND PHYSICAL QUALITIES OF THE MINOAN SHIELD. *By Professor A. E. H. Love, F.R.S. Illustrated.*

38 The questions to be answered are:—What shape does it take? Why does it take that shape? Why is it stiff along the folds?

It is necessary to distinguish a geometrical surface from a thin sheet of matter. A surface has no thickness. A sheet of matter has some thickness. A sheet of paper, for example, is bounded by several surfaces; if flat, it has two plane faces, and other bounding surfaces, which form its edge. The shape of the flat sheet is specified, nearly enough for most purposes, by

the plane midway between the faces. For a curved (or cambered) sheet there is, in like manner, a surface midway between the curved faces. This 'middle surface' can be used, for most purposes, to specify the shape of the sheet. The middle surface of the ancient leather shield, when the shield is flat, is a plane. When the shield is bent the middle surface is a certain curved surface.

Curved surfaces can be classified as either (a) 'synclastic,' like the outer or inner surface

of the bowl of a spoon, or (b) 'anticlastic,' like the upper surface of a saddle, or (c) 'developable.' Cones and cylinders are examples of developable surfaces.

There is a geometrical theory of the 'transformation' of surfaces—a sort of generalization of the theory of maps. Whenever there is a rule, or formula, by which a definite point a of a surface s can be made to correspond to any assigned point A on another surface S , the surface S is said to be 'transformed' into s . Theoretically any surface can be transformed into any other. Among the infinitely numerous transformations to which a given surface can be subjected, there are some which are such that the lengths of all arcs of curves on the surface are unaltered. When this is so, the transformation is described as a 'deformation' and the one surface is said to be 'deformed' into the other. If S is deformed into s , the length of any arc of any curve on S is equal to the length of the corresponding arc on s .

Now it is a proposition, as inevitable as the 'pons asinorum' or any other friend of our youth, but not as easy to prove, that a plane can never be deformed into a synclastic surface, or into an anticlastic surface, but only into a developable surface. In order to transform a plane into a synclastic or anticlastic surface it would be necessary that some lines in the plane should be longer, or shorter, than the corresponding lines on the surface.

The key to the mechanics of thin sheets of matter is that they offer much less resistance to bending than they do to stretching. This means that, if the middle surface of a sheet was once plane, and the sheet has not been overstrained, its middle surface must always be, actually or very nearly, a developable surface.

When the shield is flat, its middle plane cuts the surfaces, which form its edge, in a curve, which may be called the 'periphery.' When the shield is bent, by causing the ends (A, A) of the shortest diameter of the periphery to approach each other, the periphery is deformed into a curve, which does not lie in a plane, but is something like the edge of a hat brim, and the middle plane is deformed into a developable surface, which, I think, is a cone, formed by the straight lines (called 'generators') that join the point B to the points of the deformed periphery, as shown in this figure.

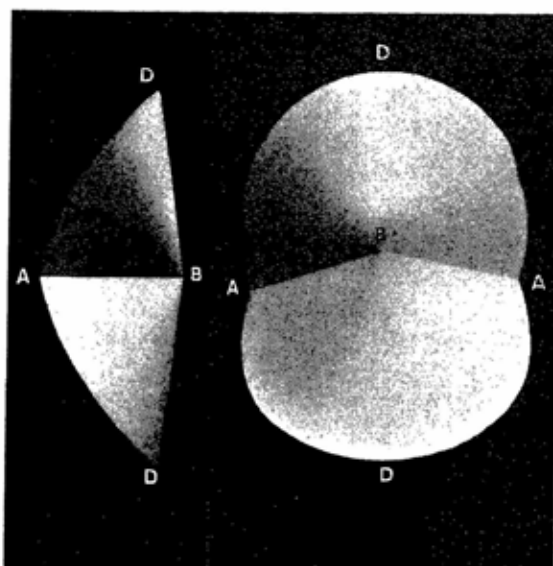
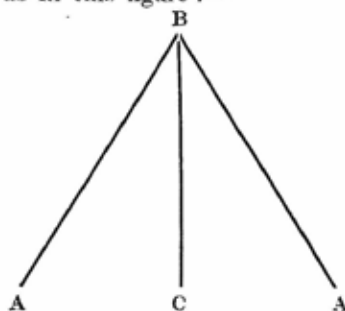


FIG. 13. THE MINOAN 'FIGURE-OF-EIGHT' SHIELD. Photograph of a paper model.

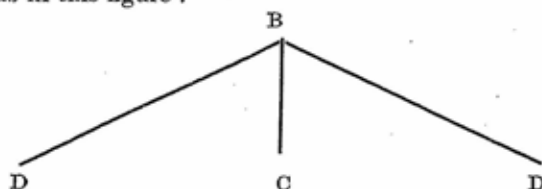
So the middle surface is like the surface of a sort of conical hat with a curly brim. I have not succeeded in proving that the surface actually is a sort of cone, or in finding an exact geometrical description of the shape of the deformed periphery. A rough idea can be obtained from the model.

The reason why the shield takes the shape that it does take, is, that this shape is the only one in which it can be held, by forces applied at A, A , and causing these points to approach each other. I have not been able to deduce the shape from this condition, but it is shown roughly by the model.

As nearly as I can make out, this shape is a cone, of sorts, as stated above. The lines (BA, BA) of the folds are two of the generators of the cone. The line BC , which bisects the angle between these may be called the 'axis.' The lines BA, BA, BC lie in a plane, and in that plane they lie as in this figure:—



Another specially interesting pair of generators of the cone is the pair BD , BD which, on the original middle plane, pass through the point B and are at right angles to BA . When the shield is bent they become generators of the conical middle surface, lying in a plane which contains BC and is at right angles to the plane ABC . The lines BD , BD , BC lie in their plane as in this figure :—



All the way round the cone, from a generator BA to a generator BD , the inclination of the generators to the axis of the cone increases.

Now it is an easy, but technical, business to prove that, if the shield were to be distorted

forcibly, so that any generator became, even slightly, curved, the middle surface, near that generator, would become either synclastic or anticlastic, and would therefore be stretched. It would also be easy to prove that, with any particular amount of bending of the generator, there would be a greater stretching if the generator were one of the lines BA than if it were any other generator, and a smaller stretching if it were one of the lines BD than if it were any other generator, with a regular decrease all the way from BA to BD . It follows that all the generators are very stiff to resist bending, and those along the lines of the folds BA are the stiffest.

I think this explains why the shield, when bent, appears very stiff along the folds and more yielding elsewhere. In the first place it is really very stiff along any generator, but the folds are the only noticeable ones; in the second place it is stiffer along the folds than along any other generators.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

Development of Esquimaux Culture in Greenland.
39 *Summary of a Communication by T. T. Paterson, M.A., B.Sc. 7th February, 1939.*

(1) *Eskimo winter house* types have been subdivided into nineteen different forms and the distinction made between the round house of the Thule culture, built into sand and gravel and roofed with whalebone, and the rectangular house of West Greenland built above ground with stones and turf and roofed with the aid of timber. An examination of the distribution of the various house types from the time of entry of the Thule people into Greenland showed that the West Greenland house-form originated around Disko Bay at the junction of the arctic and sub-arctic culture areas. From this centre the developing West Greenland culture radiated outwards, passing south round Cape Farewell, then north along the east coast, where it met the North Greenland culture of the Polar Eskimo.

By an examination of the distribution of the modern harpoon head since its origin in West Greenland a similar result was obtained.

The development of the rectangular house was shown to be autochthonous, depending on the change of climate, warmer temperature, the lack of suitable gravel in which to excavate houses, the facilities for obtaining stones and the presence of timber as driftwood. The origin of the large common house was thought to be dependent upon sub-arctic ice conditions coupled with economic pressure owing to rapid increase of population. These necessitated scattering of familial units utilizing a common boat and house.

(2) *String figures* have been collected along the coasts of West Greenland and Baffin Land. With other published figures it was then possible to draw up a distribution pattern of Eskimo string figures from Siberia to East Greenland. This pattern showed that the Greenland figures were brought there probably some 1200 years ago by the Thule culture which spread from Alaska to Greenland.

The Central Eskimo appear to have been intrusive at a later date. In the north-west of Hudson Bay they did not absorb many Thule figures but at the peripheries of the intrusive area figures were absorbed at a still later period by lateral contact. The Caribou Eskimo cannot have been derived from the Thule people.

A curious survival of older Thule figures was observed among the Inland Eskimo of Alaska, and at Angmagssalik there has been a detached peripheral development out of a limited number of figures.

The Balance between European and Native Political Authorities in Zululand.
40 *Summary of a Communication by Dr. Max Gluckman, 21st February, 1939.*

The political reaction of the modern Zulu is dominated by antipathy against Europeans. Government recognizes tribal chiefs who are granted a limited jurisdiction and who are supposed to assist Government to carry out its administrative measures. But the duty of the chief, according to the people, is to oppose Government. Despite this opposition to Government the people turn to European officers to protect them against tyranny of their chiefs.

European and native authorities are constantly compared to each other's disadvantage. The European administrators in general consider that they are trying to benefit the Zulu but are being constantly frustrated by the chiefs. The chiefs, in their difficult rôle, gratify Government at the cost of their people's support. But the system works because routine administration creates no crises and when disputes occur on important matters the superior power of Government is the deciding factor.

A recently initiated policy of development has met with great opposition, though certain measures are now being accepted by the Zulu as beneficial. This does not affect their general attitude of hostility, which is constantly reinforced by treatment of Zulu on European farms and in labour centres. Individual European officers get the trust of the Zulu while the attitude to Government in general remains unchanged. Zulu nationalism is growing again in this process. Christians, however, are on the whole more favourable to Government than are pagans.

European and native political officers have different positions and functions in the community. The European officer represents the power, knowledge, justice and oppression of the white men; he is cut off from the Zulu by the class barrier between white and black. The chief, in addition to leading the opposition to Government, represents the Zulu's traditions and values, and is part of the same black group. He is related by kinship ties to many of his people.

This balance was described in detail and with reference to the way in which European missionaries, recruiters, etc., as well as the Zulu, try (often unconsciously) to exploit it to their advantage. Members of each colour-group also endeavour, in their own interests, to exploit schisms in the other colour-group, as well as in their own, for political purposes.

Committee on Applied Anthropology. Report of a
41 *Discussion on 'The Native on the Land in South Africa'. 16th December, 1938.*

Senator Rheinallt Jones of South Africa introduced the discussion by explaining that the Union has been engaged in the last three years in determining the relationship of its native peoples to the State. The Union's projected land policy affects particularly the natives on the reserves and those who are agrarian workers. The Land Act of 1913 scheduled about 22 million acres as inalienable native areas and laid down the conditions and forms of tenure. In 1936, in accordance with the provisions of the new Native Trust and Land Act, the acquisition and demarcation of additional land for native occupation was begun. The total land finally available for native occupation will amount to about 13 per cent.

of the area of the Union; but some of the land is arid and poor. The policy of the Union is based on the principle that the native peoples will be rooted in separate territory subject to and under the control of the Union Government. The surplus native population will be resettled on the land to be acquired, which is to be surveyed and developed under the supervision and with the assistance of the Government. A Trust, with the Governor-General as Trustee, has been established disposing of funds obtained partly from the tax, from mining rights and so forth, which are to be spent for the benefit of the native people. Measures are being taken to conserve the soil and reduce the stock in the reserves. The natives bitterly oppose the latter, blaming their shortage of land, rather than excess of stock, for the present evils.

It is generally admitted that these measures will not create a large-scale native peasantry. At present 50 per cent. of adult males are absent from the Transkei at any given time—elsewhere the proportion is higher—employed in wage labour. More and more the natives are relying on money earnings to keep up their standard of living and their population. Cultivation has been diminishing. A self-subsistent native peasantry would gravely upset the whole economic life of South Africa. Already there is an acute shortage of labour. Moreover it is estimated that the native population will have doubled by 1970, so that half of it will have to live temporarily or permanently in European areas. Chiefs are already becoming apprehensive as to their rôle in relation to the new policy. What voice will they have? If they become merely the servants of the Government, they cannot retain the loyalty of their people.

The position of the agrarian population living on European farms, either as rent-paying tenants or labour tenants, is particularly precarious, and it is aggravated by the competition for native labour between European agricultural interests and mining and other industrial interests. Increasingly, pressure is being put on the native to remain on the land, while at the same time he is becoming increasingly dependent on cash wages. Sixty per cent. of European farmers, however, have not the free capital available to enable them to employ labour on a cash basis, and have therefore to rely on labour tenancy. But the younger natives prefer working on the mines to farm labour. The Government has already been placed in a dilemma in one district through the demands of farmers on their labour tenants causing the displacement of natives for whom there is as yet no room elsewhere.

In the course of the discussion it was suggested that this policy of parallel development appeared to be anomalous and anti-economic, and was the inevitable price South Africa had to pay for maintaining the supremacy of the white man.

REVIEWS
RELIGION.

The Origins of Early Semitic Ritual. By S. H. Hooke. (Schweich Lectures, 1935.) Oxford University Press, 1938. 74 pp. Price 6s. net.

42 In these lectures, Professor Hooke has developed the position outlined in the series of essays entitled 'Myth and Ritual' published under his editorship in 1933. His purpose has been to relate what is known of early Hebrew ritual to the general pattern of religious practice prevailing in Palestine and Mesopotamia during the second millennium B.C. In the light of the knowledge that has accumulated from excavation and research in this region in recent years, it is now possible to view the individual elements in the Hebrew *cultus* in relation to the culture complex from which they have emerged as isolated portions, and taken on a new existence of their own in their independent environment.

Since the dominant influence was that of Mesopotamia, Professor Hooke begins his investigation with a survey of the sources from which the available knowledge of early Semitic ritual in Babylonia can be obtained, and a description of its general character. While as he modestly remarks, "there is nothing in this lecture" which is not already familiar to experts in this field, it is no easy task to collect the scattered information and present it in such a concise form, bringing out clearly its salient features. In the second lecture, he applies the same method to elucidate the early ritual of Palestine, paying special attention to the new material from Ras Shamra, which supplies a first-hand record of the myth and ritual current in northern Syria about the fourteenth century B.C., written in a new form of alphabetic script. In the last lecture, he sets the principal institutions of the Hebrews, such as the three seasonal rituals mentioned in the Book of the Covenant (Passover, Pentecost, and Harvest or Tabernacles), sacrifice, the Hanukkah or Feast of Dedication, and certain occasional public and private rites like circumcision, in the "perspective of the Mesopotamian and Canaanite pattern." In this way he has been able to estimate the debt to these sources and to indicate the historical development of Hebrew *cultus*.

Behind the ritual system which prevailed in the Near East lay the theory of the divine kingship which found expression in the New Year Festival, and the seasonal feasts prescribed in the Book of the Covenant are shown to have been derived from this event. It was not until the prophetic movement arose in the eighth century B.C. that a break was made with this dominant culture-pattern. Under this new influence the desert tradition associated with Moses and Sinai was represented as spiritually and ethically superior to the *cultus* of the agricultural community, but the fundamental ideas of the sacrificial system have their source in the central rituals of the New Year. The *minhah*, or gifts to the Deity as the owner of the land, on the other hand, were independent of the ideas connected with the slaying of the god.

By his researches carried out over a number of years Professor Hooke has thrown a flood of new light on the origin of early Semitic ritual, and workers in this field will eagerly await a fuller statement of the matters discussed in broad outline in the last lecture in this series, when he deals with the problems more fully in a later volume.

E. O. JAMES.

The Wandering Spirit. By Dr. Ragnar Numelin. With a Foreword by Dr. Edward Westermarck. London: Macmillan, 1937. xvi + 375 pp. Price 20s.

This, as its subtitle indicates, is a study of human

migration. The author examines the fundamental reasons for wandering, more secondary manifestations of the habit, cases of migration among primitive people, the connexion of migration with social organizations, and the wandering instinct itself. As might be expected he comes to the conclusion that wandering has generally been caused by geophysical, geographical or other economic or environmental conditions which have made it necessary to migrate in order to subsist, such conditions including, of course, unnatural factors like war or conquest. Prehistoric migrations, in particular, he assumes to have been caused by the pressure of drought driving peoples north and of glacial conditions forcing peoples south. He rejects the psycho-analytic explanation of the wandering impulse as fundamentally erotic, rightly concluding that such speculations "have little connexion with ethnological facts." The desire to wander, and the difficulty experienced by gypsies and some others in adopting a settled form of life, he puts down to habit engendered by prolonged necessity, while the occurrence of such impulses in individuals of settled communities he regards as occasioned by an atavistic urge. It is true, of course, that the effect of environment decreases with the growth of civilization, enabling man to control his environment more effectively, but at the same time if it had always been true that for primitive man to be willing to remain in one place implied degeneration on his part, the world would still be migratory and uncivilized. Nomadism at the present day, however, is regarded by Dr. Numelin, not as a remnant of barbarism, but as caused by the difficulty of effecting a transition to an entirely new manner of living. The granary, he says, precedes the dwelling.

It is not possible here to enumerate all the interesting points raised, which include such subjects as zoological causes for migration and 'silent trade.' The author has dealt comprehensively with migration as a whole, and his work is likely to be particularly useful to anthropogeographers. The mere list of works to which reference is made fills forty-five quarto pages. Unfortunately the details are not always accurate: e.g., on p. 267, n. 2, the reference to Herodotus should be to the Vth, not the IXth book; n. 3 the reference to Lane should probably read ch. xix, xx or perhaps xii; on p. 21 E. H. Man is misquoted. What Man says is that nomadism is almost entirely confined to the 'aryoto' as distinct from the 'eremtaga' tribes, these two groups covering the whole Andamanese population. Few anthropologists would accept the statement made on p. 11 that "the pygmies" immigrated into Africa, gradually dividing into Bantu, "Bush and Negritic tribes." Such criticism is offered with no desire to detract from the value of a work which has clearly involved much labour and research, but may be made still more useful in subsequent editions.

J. H. H.

Religion and Medicine of the Gã People. By M. J. Field. Oxford University Press, 1937. 214 pp., with illustrations and map. Price 17s. 6d.

44 Dr. Field introduces us to a colourful pageant of the agricultural and animistic cults of the Gã People of the towns of the Gold Coast and hinterland. Her very careful and conscientious research makes this work an important contribution to ethnology. But a complete study of the religion and magic of any people can be made only when these are envisaged in the social fabric as a whole, and perhaps the delineation is a little lacking in this respect.

Part I is entitled 'Public Worship' (in the towns of Temma, Nungwa, Labadi, Osu, Teshi, Kpong, Accra).

One would have preferred this term to have been restricted to a higher worship than that of a pantheon of greater or lesser 'gods,' some of whom appear to be very short-lived. In reading the book one gets an impression now and again of what Mr. Ralph Piddington (MAN, 1938, 42) calls "a connivance at a breach of the 'first and second Commandments.'" Nevertheless, it is very evident that the Gã are deeply religious, and their rites well worth 'reconstruction' for scientific study, and 'sublimation' for religious purposes. For these aims the book will be welcomed by ethnologists and missionaries alike. One Christian Church has already made a start in the direction of sublimation.

Part II is entitled 'The principles and practice of 'medicine and magic.' In this Dr. Field discusses the dogma of human personality; describes the functions of the mediums as the mouthpieces of the gods, and deals with the subject of medicine-men in private practice and witchcraft. The rôle of the mediums in the service of the gods provides an official

and 'dignified niche for a type of person who in Europe 'would be a misfit of society.' This is indubitably true. Dr. Field uses the title 'witch-doctor' to describe a witch-finder, exorciser, or healer.

The 'Ceremonies of Everyday Life' (Part III) consist of a very good life-history of 'the child,' from the ante-natal period to the completion of puberty-rites; and a somewhat slight chapter on the 'Cult of the Dead.'

'Tone' languages are a snare, and Gã is one of these. The author's knowledge of the language will have taught her to avoid this difficulty, but she has not thought it necessary to mark the tones on the native phrases and words she gives. The word *gbe* (or *gbe*), for example, seems to have at least three different meanings. With a high-level pitch it means 'pot' (Westermann and Ward); with a low level tone it means 'road,' and in this sense Dr. Field frequently uses it, as in the ceremony of the 'closing of the road,' pp. 43-44. A third use appears to be found in the phrase on p. 172 ('are our voices one'). E. D. EARTHY.

OCEANIA.

Menschen der Südsee. By Hilde Thurnwald. Stuttgart : Enke. vii + 201 pp.

45 This book is a series of character studies of natives of Buin, in the south of Bougainville, Solomon Islands, where the author and her husband, Dr. Richard Thurnwald, have spent much time. The scientific results of the first visit were published a number of years ago, and part of those acquired in the second visit has appeared. This is another instalment.

The book begins with a chapter on the culture of Buin, with a theoretical reconstruction of the history of that culture. This chapter is a very useful summary for students, and gives the right orientation for appreciating the main part of the book. Then follow sixteen studies of natives known to the writer: their personal histories, the forces that have shaped them, the thoughts and ambitions that have moved them, are brought before the reader very clearly. The aim of the book is to correct "the errors of a one-sided materialistically directed thinking, viz., that in a primitive population "every individual is like every other." This is of value, when systems of economics, religion, and other aspects of culture are being studied, and is sometimes overlooked. At the same time, the author attempts to give these individual lives their place "in the totality of present-day life in Buin."

In the second place the book is a contribution to the study of culture contact. Buin is being rapidly influenced, like every other primitive society, by the white man: what is the effect of this on native life? This the author bears carefully in mind, pointing out at the same time that here again no systematic statement can be made: "to this change also individual persons very often react quite differently." It is natural that the bulk of the character studies should, under the circumstances, be those of women and of women's life. Yet here is a fact that is of interest, seeing how little, comparatively, the life of women in South Seas societies has been studied.

A number of well-printed illustrations make the book of value, in that they both give life to the stories by showing what the various actors in them look like, and show something of the material culture of the people. The only criticism that can be made about the outward appearance of the book is that it is rather a pity *c* has been chosen to represent the palatal plosive sound, seeing that *c* would have done just as well, and the tonic accent is already indicated by the acute accent, so that such a word as *Bóici* is a little confusing to look at.

Dr. Thurnwald contributes a short preface to a readable and useful book. A. CAPELL.

Inseln um Ponape. By Dr. Anneliese Eilers. (*Ergebnisse der Südsee-Expedition 1908-1910, II Ethnographie: B. Mikronesien, Bd. 8.*) Hamburg: (de Gruyter, 1934). xiv + 464 pp., 29 plates.

46 This volume in the great series under the general editorship of the late Professor Thilenius calls for a further tribute to the work of German anthropologists before the War. Like its predecessors, it is characterized by the presentation of a great mass of material, in a clear and orderly manner, covering geographical relationships, demography, physical anthropology, social structure, economic life, religion and material culture, with useful summaries of the ethnological position, particularly in relation to Polynesian groups. In this book five major island groups are dealt with, each in a separate section, though most of the space is given to Kapingamarangi and Nukuoro. The data given are most welcome to the student of Oceanic cultures, since until now we have had practically nothing scientific about these islands. The high technical standard of the plates, as always in this series, deserves special mention.

Judged by the standards of modern field-work, a quarter of a century after the original material was collected, there are certain obvious defects to be noted. The technological analysis, sound as far as it goes, and especially useful for the plaiting, netting and basketry, is not on the level which the work of Dr. Peter Buck has given us for Samoa, New Zealand and elsewhere in Polynesia. Only two pages each, for instance, deal with the details of canoe-construction in Kapingamarangi and Nukuoro, and there is no description of sailing technique. Good empirical material is given on local organization, on the basis of a census, and is further turned to account for generalizations about property-rights in land. But since the record was obtained through interpreters there is uncertainty in some cases how far different names apply to single individuals. This illustrates the importance of a knowledge of the language and an intimate acquaintance with the persons studied in obtaining an accurate census for sociological use. The defects of the material on the linguistic side are seen also in the lists of kinship terms, where there is no attempt to reconcile the versions of the different authorities cited. Some of the terms given do not inspire confidence, as where in Kapingamarangi,

'father's brother' and 'mother's brother' are described as *tuahin* of my father and mother respectively, this being a word used elsewhere in Polynesia only for females. And while the linguistic documentation throughout the book is rich, one suspects that it is not always entirely accurate. For instance, the name of the *Calophyllum*, an important tree, is given on page 17 as *ti tau* on Krämer's authority, with the note "*telau?*" Manuscript "illegible," whereas, on page 128, a text from Krämer gives it as *hetau*, a more probable form from comparison elsewhere. From the grammatical point of view, also, the texts of the songs given appear to be garbled in places.

Some of the most important material in the book deals with religion. Apart from the description of the wooden figures from Nukuoro, collected probably by Kubary, and representing the native gods, there are series of legends and in particular, accounts of ritual, which add considerably to our knowledge of the cults of the marginal Polynesian area. RAYMOND FIRTH.

Manus Religion: an ethnological study of the Manus Natives of the Admiralty Islands.

47 By R. F. Fortune. Philadelphia (American Philosophical Society), 1935. ix + 391 pp., illustrated.

Five years ago Dr. Margaret Mead published an account of the Manus, *Growing up in New Guinea*, that seemed almost sensational to many readers. Since then her *Kinship in the Admiralty Islands*, and now Dr. Fortune's *Manus Religion*, indicate the skeleton from which that picture was drawn.

Dr. Fortune's method of presentation does not make for easy reading, nor is his meaning always clear. The facts illustrating the working religious system are given in a diary, covering six months of 'religious events' and occupying two-thirds of the book. During this time there is no record of a seasonal ceremony nor one marking any phase in the life of the individual or group. This omission gives the impression that ritual plays no part in Manus religion, but as Dr. Fortune states in the preface that the account of ritual is to appear in a subsequent publication it cannot be assumed that no ritual took place during his six months of observation. This divorce in the presentation of ritual and religion is to be regretted. It might be inferred that Dr. Fortune considers that ritual is unimportant in Manus religion, yet he states no grounds for such an inference. Further, the séance is the mechanism by which religious sanction is imposed, and the events of numerous séances are recorded, but the procedure or ritual of the séance is not described.

The events in the diary are 'religious' because they record contacts with spirits and moral judgments are pronounced, but they are also an account of the quarrels, illnesses, accidents, and intrigues of a very hard-headed people. The most remarkable constant feature of these stories is the guilt consciousness (introjection) that they exhibit; when misfortune of any kind happens it is almost invariably assumed to be a punishment for sin committed by the victim or his kin. Projection of guilt is seen in certain forms of magic performed with hostile intent, but their scope is definitely restricted. The sanction for morality is fear of the family guardian ghost, and the cause of death is unexpiated sin. The cult is neither an ancestral cult nor a skull cult, but a father cult, with a fierce ambivalent love and hatred attitude directed towards authority. The greatest offence against the guardian ghost is loose sexual conduct, and the newer the ghost the greater his potency in punishment:—

"The Manus believe in a personal guardian from death and disaster and in a moral governor who administers an impersonal government through their Sir Ghost. But they quail in belief whenever a death occurs. Then the personal guardian has failed to guard. The sins have all been shriven and expiated, the moral government has been honoured and appeased, but the death has occurred nevertheless. So out with Sir Ghost! His skull may be battered to powder, and the powder thrown into flames, or it may merely be hurled into the sea. Sir Ghost becomes a vague lurking danger of the middle seas, not very seriously regarded—then a sea-slug. But the system goes on. A new skull is bleached from the corpse of the recently dead. It is installed in the house front with the women waiting at the reminder of the death. Long live Sir Ghost—but no longer than his son and heir whom he protects."

Kano is the payment made in expiation of sin; it is paid to the offended ghost, not ostensibly to the mortals into whose possession it passes. As I have remarked already, the dominant trait in Manus religion is the introjection, not the projection, of guilt, and the need in expiation is to appease the ghostly father, yet, as sexual sin involves two families, property paid in expiation passes out of the household of the party considered guilty. Since all girls are betrothed in infancy, the moral connotation of sexual sin coincides with the social economic attitude to marriage. Hence both by the ghosts and by the living, a powerful economic system, with a high standard of honesty and puritanical sex morals, is upheld. BRENDA Z. SELIGMAN.

ARTS AND CRAFTS.

Sledges and Wheeled Vehicles. By Gösta Berg: *Nordiska Museets Handlingar* 4 (1935). Copenhagen: Levin & Munksgaard, 1935. 189 pp., pls. xxvii, figs. 51.

48 The author believes that the North European culture province was intimately related to that of North Asia, and that it has been modified by influences from the Mediterranean and by indigenous innovations. The book is a survey of evidence, in the main from northern Eurasia, connected with the origin and spread of sledges and wheeled vehicles, and in it Dr. Berg has presented us with much important information and some very interesting suggestions. It is a book that well repays careful reading.

The author begins by describing various devices that may have been typological predecessors of the runner sledge, and refers to the hide sledges of the Lapps and Soyots, the dug-out sledge of the Samoyed-Ostyak, the

boat-shaped sledge of Carelia, etc. He mentions that bases of boat-sledges, dating from the Neolithic and Bronze Ages, have been found in Sweden. In Chapters II and III he deals with the simple runner sledge and the built-up sledge; the former was used in Sweden chiefly for agricultural work—carrying stones and the plough—and was, therefore, found in the cultivated areas. He mentions a special variety of this sledge, consisting of a forked tree-trunk, which occurs or occurred in Norway, South Sweden, Denmark, Spain and Portugal, and Assam. The reviewer has seen this sledge commonly used in Natal and Basutoland, for transporting heavy building stones and for carrying in the natives' harvest; in the latter case it is often provided with a basket-work superstructure. The simple runner-sledge survives where wheeled traffic is handicapped and occurs throughout western Europe, while the built-up sledge, i.e., where the freight is carried at a level above the runners,

is used in northern, central, and eastern Europe, and may be an adaptation to loose snow, marsh, or water puddles. Its use is not due to lack of skill in wood-work; the sledge often shows skilful carpentry, even cabinet-maker's work. We are warned against simple schemes of evolution by the adoption from Germany of the narrow racing-sledge by the gentry and government officials of Sweden, and by its subsequent spread to the peasantry where it modified the native types.

Chapter IV is devoted to the 'Double-sledge,' and Chapter V to the 'Cart.' Two-wheeled carts are represented in the Swedish rock-engravings, in some cases wheels with spokes being discernible; and a tomb in Scania has yielded a cart that dates from the middle of the Bronze Age. The early two-wheeled carts seem to have been drawn by a pair of oxen, and their area of distribution 'coincides with the old districts of the 'pair-drawn plough,' the same system of yoking being used in both cases. The cart drawn by a single animal seems to be later in the North. Dr. Berg thinks the change took place in western Europe and the British Isles when the horse replaced the ox. This would imply a long period of overlap between the two forms. The ox is the pioneer animal; its steadiness makes it much more suitable than the horse where surfaces are bad, and there must have been many roads in eighteenth-century Britain that encouraged its survival. The one-horse cart has its greatest area of distribution in central Asia, where it is the normal wheeled vehicle, but where it may have spread in comparatively modern times. In central Europe it has been replaced by the four-wheeled waggon, usually drawn by a pair of oxen; it is, however, common in northern and western Europe, where its main function is to carry manure to, and harvests from, the fields.

Chapter VI discusses 'The Slide-car and the Origin of the Cart.' The author acknowledges the important pioneer work of Dr. A. C. Haddon, who showed the evolutionary relationship between the two types of vehicles. In view, however, of all the new information that Dr. Berg produces, we shall have to extend our stage from Ireland over much of northern Eurasia. In Sweden the slide-car, drawn by men, is used in the lowlands for taking hay to the drying places; it is also used more generally as a horse-drawn vehicle. The slide-car occurs, too, in Silesia, the Tyrol, the Balkans, Norway, Finland, and Russia, and has spread to the Russian settlements in Siberia, and to the Khirghiz, Ostyak, and Samoyed. In the mountains of Hupeh and Szechuan, where it is drawn by horses or donkeys, it is used for bringing down fuel in the autumn; in the Yangtze delta it is drawn by buffaloes. Dr. Berg thinks that there may be a very ancient connection between the slide-car of the Old World and the dog-travoi of the New.

The revolving axle with its solid wheels also has a wide, though now discontinuous, distribution. The author believes it came to the North fully developed. "The spoke-wheel," he says, "should be undoubtedly recognized as being of interior-Asiatic origin." He goes on to say, "The single-horse cart has evolved from the slide-car, but this occurred in very ancient times and probably in connection with the earliest employment of the tame horse by the Altaic peoples" (p. 140). It all looks as though the process has taken place over a wide area, some places making one contribution, some another, and very likely several places making the same improvement, perhaps at the same time, perhaps at different periods; and that the diffusion of successive steps had taken place freely.

In Chapter VII there are interesting observations on the 'Wheeled-sledge' and 'Wheelbarrow.' A sledge

equipped in summer with a pair of wheels is used in Sweden almost exclusively for carrying the hay and corn. In many places it is said to have appeared only in recent times. The reviewer is inclined to think that in Wales, where it is used for carrying hay and bracken, it has also spread in the last few years. This simple, but useful, vehicle is common, too, in Norway, but is unknown in Finland. Dr. Berg writes, "It is quite obvious that its distribution is not of great age. The whole question requires closer investigation which points to the agricultural economic literature of the eighteenth century."

The wheelbarrow is fairly recent in Sweden and has never been taken into general use, though it goes back in urban cultures a good deal earlier. In many of the rural districts it first appeared in the latter half of the nineteenth century; its spread was closely associated with railway construction.

The last chapter discusses the origin and distribution of the 'Waggon.' The waggon is closely associated with agriculture and is most commonly drawn by a pair of oxen. It dates from prehistoric times in Europe, and is figured with the cart among the rock-carvings in Sweden (Rished). It occurs uniformly over central and eastern Europe from Holland to the Urals, from Bulgaria to Sweden. Into Britain, originally a cart area, it seems to have been introduced by Dutch influence.

The reviewer strongly recommends this beautifully illustrated book to anyone interested in European cultures or in general evolutionary studies. The author has described the facts as accurately and fully as possible, and, while refraining from speculations not well supported by facts, has made some valuable suggestions for their interpretation. He has given us a large amount of valuable information which should form the basis of much regional study in these islands and elsewhere, and he is to be congratulated on having made an important contribution to scientific knowledge.

R. U. SAYCE.

A Preliminary Consideration of Aboriginal Australian Decorative Art. By Daniel Sutherland Davidson. (*Memoirs of the American Philosophical Society*, IX, 1937). Oxford. Price 9s.

As a record of collected material, the value of this book is much greater than its size. The bulk of the evidence is from the five Australian museums, and the Museum of the University of Pennsylvania. More than 300 specimens are recorded, mostly by line-drawings, and though good photographs are preferable, as a general rule, these drawings have every appearance of exactness, and have lost nothing by reproduction. Several of the photographs are not so successful, as the detail of the design is scarcely visible. The descriptive matter and the classification of the objects are informative and objective. There are cautiously constructed maps of distribution and a bibliography.

The author observes that the evidence "is still insufficient for more than a preliminary consideration of many aspects of Australian decorative art". Many designs are painted for purely temporary purposes, and in a highly perishable medium. Few of the ceremonial ground-drawings are on record. Mr. Davidson is hopeful that research may lead to a more complete picture since this is still "a living art," offering "a very fruitful field for investigation in those areas where changes are taking place under strictly aboriginal conditions." It would be interesting to know how many areas there are where this wandering people are entirely immune from direct or indirect alien influence. In his preface, the author remarks that, "Whether attitudes

"in respect of art have changed slowly or rapidly, if at all, in any given region is impossible to determine without historical evidence, but with adequate archaeological material we can hope to learn something of these changes, and he ends with the hope that archaeological activities will be successful in establishing chronological relationship, at least for incised designs in the various parts of the continent. Until such studies are made the basic problems cannot be treated further." It is difficult to see how the archaeologist would set about his work in Australia; what hope there can be for the survival and discovery of

archaic specimens; how they can be identified as such, or dated. This absence of such material is one of the two most serious obstacles to tracing the evolution of primitive art, the other being the lack of chronological data. Many anthropologists have ignored these difficulties, by an entirely subjective selection and arrangement of available evidence, in which chronology is left to take care of itself. One entirely agrees with Mr. Davidson's concluding sentence. "But the basic problems of the evolution of this, or any other art, cannot be conclusively solved without archaeological and chronological data." W. PAGE ROWE.

CORRESPONDENCE.

The Kaiamunu-Ebiha-Gi Cult in Papua. (Cf. *J.R.A.I.*, LXVII).

50 SIR.—Dr. Wirz's article on the *Kaiamunu-Ebiha-Gi* Cult in the Delta Region and Western Division of Papua (*J.R.A.I.*, LXVII) is of special interest to me because I have personal acquaintance with one of the cultures it discusses; his sphere of investigation on the west, and my own on the east, coincide over the Purari Delta. But apart from its conclusions, I find the article interesting because it reveals so strikingly the difference between two possible methods of approach, both of them being, as I imagine, legitimate to anthropology.

Dr. Wirz has covered a great deal of ground geographically, and in studying a great variety of cultures (with particular reference, in the above-named article, to their religious aspect) his aim appears to be to discover resemblances, correspondences, and identities among them. I, too, have covered a good deal of ground—from the Purari Delta eastwards along the whole Gulf Division coast—and, while one cannot remain unconscious of these resemblances, etc., I find that I am equally, or more, impressed by the differences.

The Elema, as the people of the Gulf Division coast are called, have a great deal in common with the Namau of the Purari Delta; and the Elema themselves, along 100 miles of coastline, are in a cultural sense more or less homogeneous. Such, nevertheless, are the differences in every tribe that I have found, that the only feasible method of doing my own kind of work is to concentrate on one of them. The rest, if not wholly ignored, are brought into the picture only in so far as they may possibly throw light on the central subject.

The method employed by Dr. Wirz, on the other hand, has been to select a religious cult in one of the cultures along his beat, and to seek parallels to it in the others. This is undeniably an intensely interesting study; but the final results of it are mainly of ethnological or antiquarian significance. It certainly gives us some intellectual satisfaction to be shown that the *Kaiamunu* cult, e.g., has close connexions with the *Gi* cult, but that does not tell us very much about either in itself. Needless to say the connexion between these two—as that between others, in the geographical sense more nearly related—is not present to the consciousness of the natives themselves. To them *Kaiamunu* is *Kaiamunu*, and *Gi* is *Gi*; and it is principally in that light that they appear to me. Each has, in its own surroundings, a nexus of functions and values. The method of approach which, as a Government anthropologist, I find more attractive and promising, is to study one or the other on its own ground in the hope of discovering what these functions and values are, in relation to the people to whom it actually belongs.

Even in one and the same tribe there may be two or more cults for which a common origin can be very

plausibly assumed, and which are yet to all intents and purposes separate. I think, e.g., of the Bull-Roarer, the *Hohao* (corresponding to the *Kwoi* of the Purari Delta), and the tall masks called *Hevehe*, all belonging to the Elema people. The very shape of the material objects concerned (though their size may vary from less than 15 ins. to more than 15 ft.) is enough to suggest that the real original is the bull-roarer; and there is (at any rate in the cases of the first and third) better evidence for a common origin than that of mere form. But, while all these cults must possess a great deal in common, not only in their assumed origin but in the whole background of religious beliefs and motives which is more or less characteristic of the Elema throughout, they yet remain essentially separate and independent. It would be no solution of the problems they present, no explanation with which we could rest satisfied, to say they were all really bull-roarer cults. Each exists in its own right and deserves study in itself, and each is a surprisingly large subject.

I would not deny that I have dabbled in the ethnological quest myself, going in search of identities and origins. But the above-named article seemed to present an opportunity for criticizing a method of treatment which I have largely forsworn. It is of course a perfectly good method as long as it is not thought all-sufficient. That Dr. Wirz does not himself think so is proved by his notable researches in the other intensive manner, which seems so much more useful.

Kikori, Papua.

F. E. WILLIAMS.

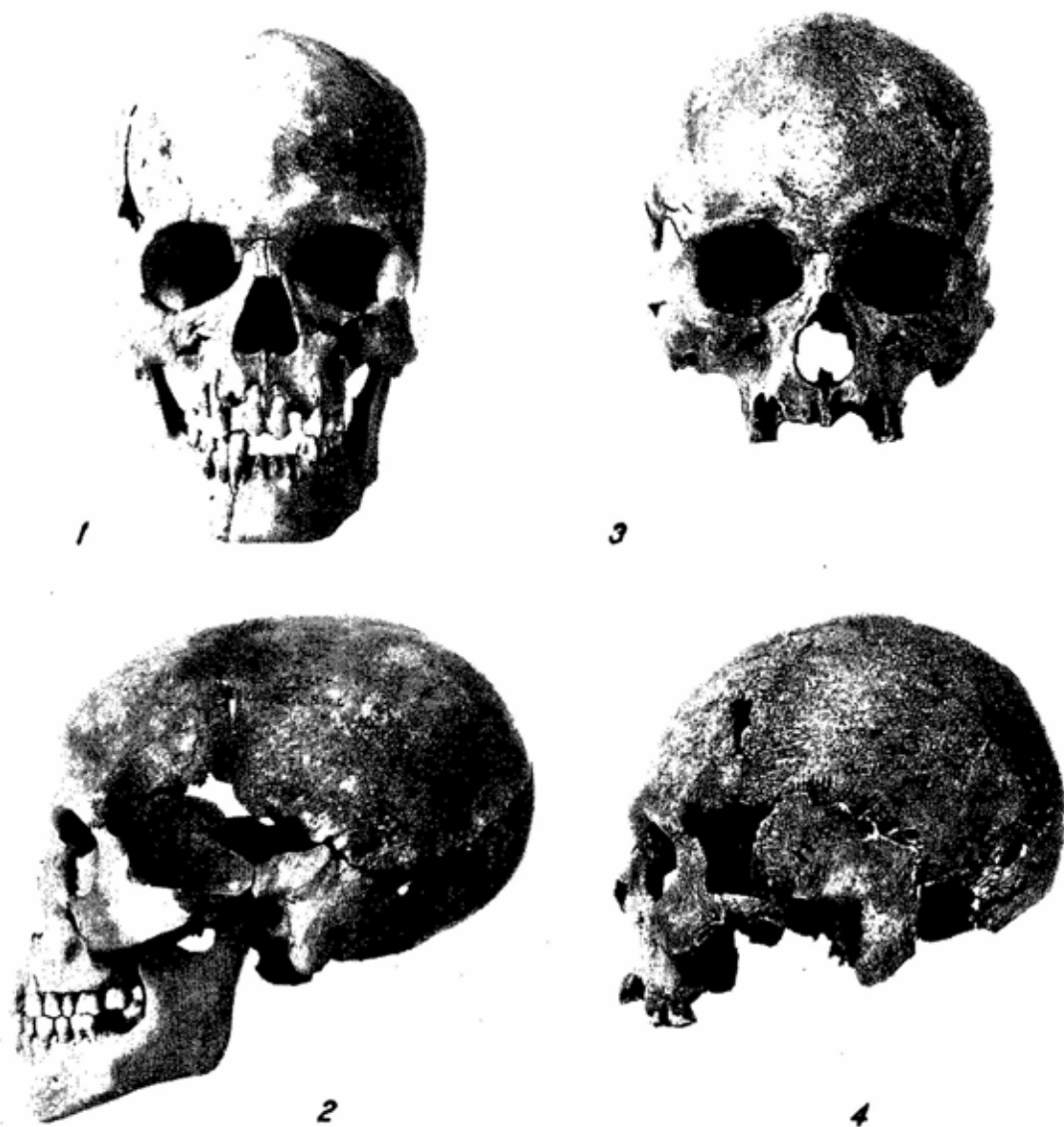
The Papuan Instrument called 'Pombo' and the Drink called 'Hamu'. (Cf. *MAN*, 1932, 285.)

51 SIR.—Some years ago I wrote about an article called *pombo*, which was, I said, used in collecting the sap of a root called *hamu*. The sap was then drunk by the men of the tribe, who lived on the upper waters of the Purari River; the special virtue of the sap was that 'it made their skins clean.'

Mr. Foldi, A.R.M., who is stationed at the Kikori station, in the Gulf of Papua, has collected further information and writes as follows: "Young men of about twelve years of age are initiated into the drinking of *hamu* thus. Starting about dusk, *hamu* is administered in large quantities until, somewhere about 10 p.m., the initiate rolls over incapacitated. A burning ember is then placed on his arm to make sure that he is really out to it. He is then left to sleep off the effects, usually awakening about dusk the following day. The consumption of large quantities of *hamu* is often accompanied by vomiting and considerable pain. After this little ceremony the boy is allowed to make and consume *hamu* of his own free will."

J. H. P. MURRAY.

Port Moresby.



TWO SKULLS FROM THE WEST INDIES.

1. 2. MALE NEGRO FROM BARBADOS, BRITISH WEST INDIES (U.S.N.M. 378246)
3. 4. UNDEFORMED MALE INDIAN FROM CUBA (U.S.N.M. 363060).

Both skulls are oriented in Frankfort position and reduced to about one-third natural size.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

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With Plate D.

Stewart.

NEGRO SKELETAL REMAINS FROM INDIAN SITES IN THE WEST INDIES¹. By T. D. Stewart, Division of Physical Anthropology, United States National Museum, Washington D.C.

52 The recent paper in this journal by Buxton, Trevor and Julien (*MAN*, 1938, 47) implies that an undeformed Negroid physical type inhabited the Virgin Islands in pre-Columbian times. Not only is this implication contrary to previously accepted findings for the Antillean area (as will be shown later), but it also fails to give adequate consideration to the possibility of these skeletal remains representing intrusive Negro burials. The mere presence of skeletons in a sand or shell mound of Indian origin, lacking careful stratigraphic records, is not certain evidence of primary association with the accompanying artifacts. Moreover, I venture to say that few physical anthropologists familiar with American Indian skulls would mistake for Indians those illustrated by Buxton, Trevor and Julien; indeed, most physical anthropologists would probably be less conservative and say "Negro" instead of "Negroid."

In support of the opinion that these authors are describing Negroes I wish to present a similar case from Barbados, British West Indies. From correspondence with Mr. E. M. Shilstone, of Bridgetown, Barbados, it appears that in August, 1933, he commenced to excavate a sandy ridge about 50 yards from high-water mark on the shore of Chancery Lane on the southern coast of the Island. This ridge proved to be a kitchen midden containing many objects of Arawak workmanship. Among other things encountered in this site was a skeleton, lying on its left side at about 20 inches under the surface. Mr. Shilstone believed this skeleton to be that of an Arawak Indian, and, in 1937, presented it as such to the U.S. National Museum. Upon reconstructing the skull from the many fragments in which it was received in Washington, I felt justified in calling it a Negro, for reasons that will appear from the following description.

Two views of the Barbados skull are shown in Plate D.I.2. Comparison with the two skulls shown in the paper by Buxton, Trevor and Julien (*MAN*, 1938, Plate D) indicates that the individual and sex differences are no more than would be expected of the range of variation in a single race. Certainly, however, such Negroid features as alveolar prognathism, broad nose, and low orbits are more pronounced in the case of the Virgin Island skulls.

In order to evaluate better the metrical findings, Table 1 contains measurements and indices of the Barbados skull in comparison with the range of variation of the five males from the Virgin Islands and with that of 68 male Negroes from Bennington's (1912) Gaboon series. These figures are presented for what they are worth, which, unfortunately, is probably very little, because measurements are very imperfect descriptive agents, and more than one racial group may fall within the same range. The eye is able to detect racial differences that are only masked by figures. I have selected the Gaboon series for comparison because it is from the west coast of Africa, and is about the best available; it is not, of course, fully representative of the population from which Negro slaves were shipped to the New World. This table shows that the Barbados specimen falls within the range of the Gaboon Negroes, except for maximum skull length and cranial index; like-

¹ Approved for publication by the Secretary of the Smithsonian Institution.

TABLE 1.—Comparative measurements of Negro skulls.

| Measurement | Barbados 378246 Male | Range of Virgin Islands Males (5) | Range of Gaboon Negro Males (68) |
|--|----------------------------|---|--|
| | (mm.) | (mm.) | (mm.) |
| Max. sag. glab.-occ. lt. (L) ... | 196 | 170.5—186.5 | 170—192 |
| Max. trans. bipar. br. (B) ... | 134 | 131.5—141.5 | 130—148 |
| Min. front. diam. (B') ... | 97 | 95.9—99.6 | 90—106 |
| Basi.-breg. ht. (H') ... | 144 | 134.0—142.0 | 125—148 |
| Basion-nasion (LB) ... | 104 | 97.0—104.4 | 90—107 |
| Basion-alv. pt. (GL) ... | 105 | 102.8—105.7 | 90—110 |
| Nasion-alv. pt. (G'H) ... | 71 | 59.3—65.6 | 51—77 |
| Max. biz. br. (J) ... | 131 | 132 | 118—142 |
| Nasal ht. (NH) ... | 47 | 43.4—50.7 | 40—55 |
| Nasal br. (NB) ... | 26 | 22.0—30.3 | 21—33 |
| Orb. br. (maxillo-front.) (O ₁) ... | 42 | 40.9—43.6 | 38—45 |
| Orb. ht. (O ₂) ... | 33 | 30.8—35.5 | 31—40 |
| Cranial index (B × 100/L) ... | 68.4 | 74.3—78.9(?) | 69.7—82.4 |
| Ht.-lt. index (H' × 100/L) ... | 73.5 | 75.6—76.1 | 69.6—82.7 |
| Br.-ht. index (B × 100/H') ... | 93.0 | 97.5—102.5(?) | 89.9—110.7 |
| Nasal index (NB × 100/NH) ... | 55.3 | (?) 43.9—69.8 | 42.0—67.5 |
| Orbital index (O ₂ × 100/O ₁) ... | 78.6 | 70.6—83.7 | 73.8—97.4 |

TABLE 2.—Frequency of undeformed skulls in collections from the West Indies.

| Island (Coll.) | Deformed (Fronto-occ.) | Probably Undeformed |
|----------------------------|---------------------------|------------------------|
| <i>Bahamas</i> | | |
| Brooks (1889) ... | 3 | — |
| U.S. Nat. Mus. ... | 3 | — |
| <i>Cuba</i> | | |
| U.S. Nat. Mus. ... | — | 5 |
| <i>Jamaica</i> | | |
| Flower (1895) ... | 5 | 1 |
| Haddon (1897) ... | — | — |
| U.S. Nat. Mus. ... | 11 | — |
| <i>Haiti-Santo Domingo</i> | | |
| U.S. Nat. Mus. ... | 56 | 4 |
| <i>Puerto Rico</i> | | |
| U.S. Nat. Mus. ... | 1 | 1 |
| <i>Virgin Islands</i> | | |
| U.S. Nat. Mus. ... | 6 | — |
| Totals ... | 85 | 11 |

wise, the Virgin Island specimens fall within this range, except for nasal and orbital indices. The exceptions, as noted above, are more in the direction of the Negro than the American Indian.

In addition I may point out a Negro character in the Barbados skeleton, namely, that the long bones, particularly the femora, are straighter than is the case in Indians. The radio-humeral index is 80.1, which could be either Negro or Indian (Hrdlicka, 1932). The maximum length of the right femur is 423 mm., which corresponds

to that of one of the males (Am. 40. 1.5) from the Virgin Islands.

Without going into further details in connexion with physical type, I will call attention to one thing that clearly proves the Barbados specimen to be Negro. The photograph of the normal frontalis shows the upper median incisors (the only incisors *in situ*) to be artificially pointed. We have here a well-known type of West African dental mutilation (von Ihering, 1882). Saville's (1913) study of this practice in America indicates nothing comparable in the New World. Incidentally, the Gaboon series used in metrical comparison above are said by Bennington (Notes in tables) to include examples of filed teeth. The process by which the mutilation is produced is variously described as filing or chipping. I would say that in the case of the Barbados specimen the teeth were chipped.

In view of the fact that the teeth of the Barbados skull have been subjected to mutilation, it is perhaps significant that skull Am. 40. 1.2 from the Virgin Islands (Plate D, 2) has its four lower incisors missing (antemortem), and that skull Am. 40. 1.1. from the same locality (Plate D, 1) has what appears to be a notch between the upper median incisors. By reference to von Ihering's paper it will be seen that some African tribes practised tooth evulsion either with or without tooth filing (chipping). A notch between the median incisors is a distinct type of dental mutilation in Africa.

Although no further evidence would seem to be needed for refuting the inference stated in the beginning, it is desirable to show in how far this is contrary to previously accepted findings for the Antillean area. Table 2 summarizes the skulls and frontal bones from the West Indies that are available to me, either in the literature or in the collections of the U.S. National Museum. Only 11 of these 97 specimens may be said to be probably undeformed.

The small collection from Cuba, of which the history is unknown, stands apart from all the rest in showing no fronto-occipital deformity. Since Harrington (1921) has reported a clear distinction between the 'Ciboney' and Arawak peoples of Cuba as regards the practice of cranial deformation this collection may represent the former group. Since, then, it is not impossible to find undeformed Indian skulls in the Antilles I present also in Plate D.3.4. one of these Cuban skulls for comparison with the Negroes. The contrast with the Barbados skull shown in the same plate is so striking that I will give only three indices for the Cuban: Cranial index 79.7, nasal index 43.4, orbital index (maxillo-front.) 81.0. It will be observed that all three of these figures fall within the range of the Gaboon skulls. However, only two of the 68 Gaboon skulls have a nasal index below 47 (leptorrhine), and only eight have a cranial index over 79 (high mesocrany). I believe the Cuban skull here illustrated will prove

to be fairly representative of the undeformed Indian population of the Antilles, of which those described by Buxton, Trevor and Julien certainly are not a part.

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THE EARLY SPREAD OF AGRICULTURE. *A paper read before the International Congress of Anthropology and Ethnology at Copenhagen, 5 August, 1938. By Harold J. E. Peake, M.A., F.S.A.*

53 In a former paper¹ I endeavoured to show that the data available at the moment suggest that wheat was first cultivated in Palestine, and that the variety grown was *Emmer*. That the cultivation of this grain spread to the south-west is indicated by the fact that *Emmer*, or some derivative such as macaroni wheat, *Triticum durum* Desf., is still the grain most commonly grown in North Africa from Egypt to Morocco and up the valley of the Nile as far as Abyssinia. In the last-named country, owing perhaps to its early introduction, but mainly to the great diversity of altitudes there, more varieties of *Emmer* are grown than elsewhere; this has led Vavilov² to postulate that it was in this country that it was first grown.

We have, however, definite evidence of the early cultivation of *Emmer* in Egypt. Some

years ago Brunton discovered south of Asyût the remains of a very early culture that he termed Tasian.³ The people responsible for this were clearly immigrants, for the skulls⁴ of some of them were unlike any found in this part of Africa, and resembled those usual in Anatolia, with a southern extension to the Judean plateau. The Tasians appear to have lived in villages and made excellent pottery; there is, however, no direct evidence that they cultivated grain, but their settled existence seems to imply that this was the case.

If there is any doubt that the Tasians were cultivators there is none with respect to the Badarians,⁵ who succeeded them in the same region. These people also appear to have been immigrants, for the skulls of most of those found are longer and narrower than is usual in

Egypt and more nearly resemble a type found most frequently in Southern India.⁶ The Badarians, too, were a settled people and acquainted with the potter's art. In one of their graves Brunton found a stone jar containing a variety of seeds, and amongst these grain that has been identified as *Emmer*.⁷ A similar culture was found about the same time by Miss Caton-Thompson in the Fayûm, and here she found straw granaries, filled with grain which was identified by Percival and Stapf as *Emmer*.⁸

Emmer in some form was grown in Egypt in Predynastic and Dynastic times, and it seems probable that no 'Bread Wheat' was introduced into that country until Roman times.⁹ The cultivation of *Emmer* was for some time limited to the northern part of Africa and the shores of the Levant, and its introduction elsewhere will be discussed later.

From Palestine the cultivation of *Emmer* must have spread into South Syria, where this grain grows wild, but in North Syria the wild grain is *Einkorn*, and it would seem that the people there took to growing this distinctly inferior grain. It seems almost certain that this was the grain cultivated by the people responsible for the Tall Halaf culture, which has been found spreading from the neighbourhood of Aleppo¹⁰ to Arpachiyah on the outskirts of Nineveh.¹¹ The main concentration of this culture seems to have been on the foot-hills of the Armenian *massif* near the headwaters of the Khabur.¹²

Einkorn grows wild also in Anatolia, and, since we have found early settled civilizations in Cilicia,¹³ the Troad and elsewhere, we must conclude that the cultivation of *Einkorn* spread throughout this area. There are some indications that this culture crossed the Bosphorus or the Hellespont to the northern shores of the Ægean, though this spread has not yet been fully discussed. From the north of the Ægean, agriculture probably spread to Thessaly, though the First Thessalian culture may have crossed the Ægean from Asia Minor by a chain of islands. It almost certainly reached the mouth of the Vardar and passed up the valley of that river and down that of the Morava to the Danube basin. Thence the spread of agriculture, with the First Danubian culture, has been ably traced by Childe¹⁴ as far as the Rhine basin, to the neighbourhood of Brussels, and to the pile-dwelling civilizations by the lake shores of Central Europe.

As soon as agriculture had been practised in Palestine and Syria, it must have spread rapidly along the margin of the desert to the Zagros Mountains, and in fact we find it very early in Assyria. The passage across the mountains by Hamadan is not difficult, and the evidence found by Herzfeld on the hills around Teheran shows us that settled villages, presumably growing grain, existed in that part of Persia as early as the settlement at Arpachiyah, if not earlier. That it was in this area that *Emmer* was crossed, naturally or intentionally, with some species of *Ægilops* to produce a 'Bread Wheat,' probably *Triticum compactum* Host., has already been suggested in my former paper.¹ From the Teheran neighbourhood agriculture spread southwards until it reached Susa, and soon it crossed the mountains again into Mesopotamia, bringing with it the Al 'Ubaid culture. It is probable that some form of *Emmer* had been grown here up to then, as it was at a later date, for a pot found at Jemdet Nasr¹⁵ was filled with grain which Percival identified as *Triticum turgidum* L. That the practice of agriculture with settled villages and pottery spread over the greater part of Persia, which was then less arid than at present, is clear from the discoveries of Herzfeld and Sir Aurel Stein. It seems not, however, to have reached as far east as Baluchistan until a somewhat later time.

From Persia it is not difficult to pass through the mountains near Herat into Turkestan, and there is a way of considerable antiquity by Meshed. By one or other of these routes, perhaps by both, agriculture spread to the foot-hills lying on the south of Russian Turkestan, and here there are signs of many villages of early date, one of which, Anau, was carefully explored by Pumpelly. Here the excavators found two 'kurgans' and two periods of occupation in each; the earliest of these was represented by the lower layers of the North Kurgan. In a potsherd taken from a low level of this layer Schellenberg found the impression of grains 'that belong to the group of *Triticum vulgare* Vill.'¹⁶

We can hardly doubt that agriculture, once it was introduced on to these foot-hills, spread in either direction, but as yet other early sites have not been explored. It seems likely, too, as we shall see, that it spread still farther both to the east and to the west.

The spread of agriculture, involving the culti-

vation of some form of 'Bread Wheat,' to the east would bring it to Afghanistan, a land with great variations of altitude like Abyssinia. Here we should expect a great number of varieties to develop, and it is here, on that account, that Vavilov would place the first cultivation of the *T. vulgare* Vill. series.¹⁷

Beyond Afghanistan two ways of advance were open. We will first follow that to the south-east through the Khyber Pass to the Punjab. The plain of the five rivers must then have been dense jungle interspersed with large marshy areas, and a primitive agricultural people would naturally cling to the foot-hills, to which they had been accustomed while in Turkestan.

On reaching the plain the immigrants could have turned in two directions, either east along the north of the plain or southwards along the Baluchistan border; I would suggest that they did both. The eastward route has not been searched for early remains, except at Harappa, but farther south on the east margin of the plain a few potsherds of the Indus civilization have been found at Rupal on the Sutlej near the foot of the Simla hills.¹⁸ The southward route has been better explored, especially in its southern part in the province of Sindh; here settlements have been found stringing out in three or more lines till they reach almost to within sight of the Indian Ocean near Karachi. All these have yielded the typical pottery, red with naturalistic designs in black, familiar from the excavations at Mohenjo Daro by Sir John Marshall¹⁹ and from the survey of Majumdar.²⁰ At Amri, not far from Karachi, Majumdar found two distinct layers, and from the lower of these extracted a number of sherds of a type more primitive than those from Mohenjo Daro; on these the decoration was of more geometric style. Now, if we compare the form of the vessels found in this layer, and the style of their decoration, with corresponding items from the top layers of the earlier deposit in the North Kurgan at Anau, we cannot fail to be struck by their resemblance. From this it is possible that the early civilization of the Indus basin has been derived from Turkestan. At a slightly earlier date pottery from Sistan and Baluchistan, resembling that from Susa II, began to filter in from the west. The grain found on these sites is *Triticum sphaerococcum* Perc., which is still grown in Western India and Afghanistan.

From Afghanistan there is another route to the east along the foot-hills to the north of the great central mountain *massif* of Asia; that is to say, along, or just to the south of, the ancient Silk Route. Though no remains of a culture early enough for our purpose have been discovered by Sir Aurel Stein or other explorers of this region, we have evidence still farther east that the knowledge of agriculture was carried this way. From near Lop-Nor along the valleys of the Wei and the Hoang-ho, almost to within sight of the Pacific Ocean, there lie a great number of early agricultural villages, with remains of pottery, painted with designs that in a general way resemble the wares of Anau, as has been made known to us by the researches of Gunnar Andersson.²¹

So much for the eastward spreads of agriculture from Russian Turkestan; the westward spread lacks continuous evidence. As far as the Caspian Sea the way is clear, but beyond there arise difficulties. It should not have been impossible to pass along the southern shore of that sea, and northwards to round the spurs of the Caucasus mountains. It is strange that no early evidence has been noted here, but when we cross the Dnieper into the 'Black Earth Lands' of South Russia we find settled agricultural communities making pottery, painted in designs which recall the wares of North China. We can hardly doubt that, in spite of strong local differences, this pottery belongs to the same general culture-complex. This is known as the Tripolje culture.²² Unfortunately no form of wheat has yet been reported from any of these sites, though we shall find evidence in other areas that received their culture from the 'Black Earth Lands.'

Many prehistorians believe that the Tripolje culture was derived not from the east but from the Danube basin; this view has been well set out recently by Kandyba.²³ There are, it is true, certain Danubian affinities, such as the shoe-last celt and perhaps the spiral, but the culture seems to be of mixed origin, though the Danubian elements are more abundant on the type-site. Nevertheless the painted wares, both in form and technique, seem to connect better with the borders of the eastern steppes than with the south-west. If it is true that the skull of a camel has been found at Tripolje, this would be an additional proof, since this animal is believed

to be a native of the Gobi Desert, and appears in the second period at Anau.

The culture of the 'Black Earth Lands' spread in various directions. To the south, pottery resembling that of South Russia occurs at several sites in Wallachia and in the Dhimini ware of the Second Civilization in East Thessaly,²⁴ where a grain was found in Sesklo by Tsountas;²⁵ this was identified by Wittmack as *T. vulgare* Vill. A like culture was found by Laszlo at Erösd and other sites in the valley of the Alt in Transylvania,²⁶ and from thence this culture seems to have passed by Tordos into Hungary, and merged with the Danubian culture. Grains identified as *T. vulgare* Vill. have been found at Felső-Dobsza, Agg-telek and Lengyel,²⁷ mostly belonging to the Second Danubian culture. By this means the cultivation of 'Bread Wheat' spread to the Rhine and to the pile-dwellings of Switzerland. Lastly the villages and pottery spread to the Ukraine; but I have found no records of early grain from that province.

We have now traced the spread of agriculture to most parts of the Old World where it was known in early days, excepting western and northern Europe, and to that problem we must now turn. Let us first examine the conditions in Crete.

Sir Arthur Evans²⁸ has demonstrated that the earliest neolithic civilization in Crete has affinities with Asia Minor, and we may conclude, therefore, that *Einkorn* was the first type of wheat to be grown there. Evans²⁹ has also pointed out that, when the two kingdoms in Egypt were unified by Menes, certain peoples of Libya migrated to Crete. These would have brought with them *Emmer*; this must have ousted the more primitive grain, which would, however, have survived as a weed in the fields of *Emmer*.

In a lecture that I gave recently in Manchester³⁰ I endeavoured to show that at the beginning of the First Early Minoan period, about 3000 B.C., there was a maritime movement that carried various elements of culture to the west. These elements comprised a form of building, known as a *tholos*, and five ceramic features, a handle and four designs. These had reached Crete from various sources, Egypt, Syria and the Troad. I traced the movement of these cultural elements from Crete to Malta, Sicily, Sardinia, Spain, Portugal, Brittany, and up the Irish Channel and around the north of Scotland to Denmark.

This maritime trade seems to have introduced agriculture wherever it touched, and the grain that it carried would have been *Emmer*, though perhaps mixed with a small quantity of *Einkorn*.

It is possible that this trade touched also the south of France, or the hunting peoples of that country may have picked up their knowledge of agriculture and pottery from their neighbours in Spain. Whatever be the true explanation, they made pottery and grew grain, presumably *Emmer*, and carried their culture to the Rhine and beyond, and to the western lakes of Switzerland. Thus they brought to these lands the Michelsberg culture and to Switzerland its *westische Keramik*, and introduced *Emmer* into the latter country, in which only *Einkorn* and, more recently, 'Bread Wheat' had arrived. Thus I would account for the presence of these three grains in Neolithic Switzerland in preference to the more complicated explanation offered by Dr. E. Schieman.³¹

One more line of movement must now be traced. Rosenberg³² has lately shown in a most masterly manner that pottery, decorated with impressions of whip-cord, was carried at an early date from the Ukraine to the south-east corner of the Baltic Sea, whence it travelled northwards to Finland and westwards to Denmark, where it was used in the 'dwelling-places.' We can hardly doubt that grain accompanied this pottery, or that the type of wheat so carried was some form of 'Bread Wheat.' Thus by a different route the third type of wheat arrived in Denmark. We have now accounted for the arrival in that country of *Emmer*, 'Bread Wheat' and a little *Einkorn*, and this agrees with the conclusions arrived at by Sarauw, who found in the neolithic pottery of Denmark 288 impressions of *Emmer*, 46 of 'Bread Wheat' and 21 of *Einkorn*.³³

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- ³³ Sarauw, G. F. L. MS. summarized in Hatt, G. *Landbrug i Danmarks Oldtid*. (Copenhagen, 1937) 20, 21.

THE BURIAL CUSTOMS OF THE WAR TRIBE. *Illustrated.*

54 The following notes on the burial customs of the War tribe of Shella in the Khasi Hills of Assam are obtained from material supplied by Mr. David Roy, a Khasi magistrate of that district, my indebtedness to whom I gratefully acknowledge. They are interesting as affording a very clear link between the Nicobarese custom of boxing up the bones of the dead in a wood statue,¹ and the practice of certain trans-frontier tribes of the Naga Hills, who make a statue for the reception of the souls of the dead.² Traces of a similar custom likewise appear among the Garo of Assam and the Sawara of the Madras Agency Tracts.³ In the case of the Nicobarese the actual bones of important persons are let into

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a wooden torso which supports the skull itself of the dead man; in the case of the Nagas the skull is set on the top of the head, where it is kept in place by 'horns,' for long enough to enable the soul to descend from the head into the statue. In the case of the War of Shella, however, the soul is introduced by means of a vehicle taking the form of a cowrie shell, which is clearly a substitute from the dead man's actual bones, apparently unavailable in consequence of the superimposition of the custom of burning on that of the exposure practised still by the Naga tribes referred to and by the Nicobarese.

When a person of the War tribe dies, a lock of his hair is cut from the head with an iron arrow-head before the body is placed on the pyre; before the pyre is lit, the arrow thus used is shot from the left of the pyre to the right. It may be noted here that the Sawara of the Madras Agency Tracts, who, like the Konyak

¹ Vide MAN, 1932, 133; *Report on the Census of India*, 1931, vol. I, pt. i, p. 309; pt. iii B, p. 15.

² *Memoirs of the Asiatic Society of Bengal* (new series), XI, 1.

³ *Census of India*, 1931, I, i, pp. 399 sq., 406; iii B, p. 4.

Naga, use a wooden figure for the temporary accommodation of the soul,⁴ fire off two arrows at random after the body is burnt and before leaving the cremation ground. In the War process of cremation a bone is saved from the right hand or foot and this bone and a lock of hair are placed on a leaf of the *lakhiat* tree (*Premna bengalensis*?) in the jungle close to the place of cremation. Either three days later or in the course of the next lunar month a ceremony is performed at the place of cremation in the course of which a cowrie-shell is thrown on the ground, rice is scattered round it and the name of the deceased is called, after which the shell is lifted on to a piece of new white cloth, which is sprinkled with water. The shell wrapped in the cloth is brought home to a solid wooden post about 3 to 3½ feet high, already erected, in which

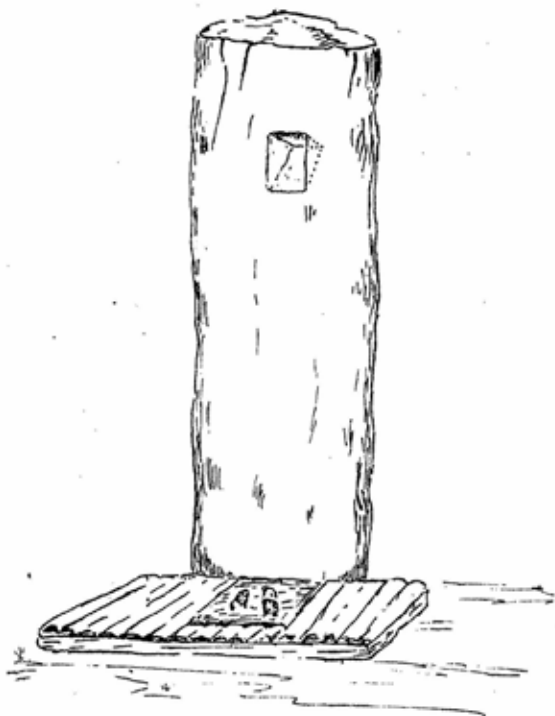


FIG. 1. BURIAL POST OF THE WAR TRIBE.

a slot is cut, towards the top of the post, deep enough at its upper end to hold a minute basket of split bamboo. At the foot of this post is a small bamboo platform on which an earthen

hearth is made and a little fire lighted between three miniature hearth stones. Here the cowrie-shell is transferred to a fresh piece of new white cloth and, after certain ceremonies, wrapped up in the cloth, placed in a little basket-work case of split bamboo, and put into the slot in the post, which is then sealed up with a wooden plug.

The cowrie shell which is thus treated is regarded as the deceased's bones. It remains in its slot in the post until the *Niam Bah* ('Great Ceremony'). This ceremony takes place when the deceased's family have become satisfactorily and prosperously established in this world, and may take place as long as forty years after the cremation. At this *Niam Bah* the cowrie-shell is removed from the post, placed on a new white cloth and there washed, and some vegetable fibre (*u stein*), said to represent hair, is inserted into it. A bull or a cow is sacrificed according to the sex of the deceased and a bone of the animal together with the cowrie is placed in a basket which is tied to the post of a small hut specially built for its reception at this ceremony, after which the hut and its contents are allowed to decay without attention being paid to them.

Before the *Niam Bah* the soul of the dead person is regarded as remaining in the vicinity of the family, and a parcel of land known as *rishieng*, or 'bone grove,' is specially allotted to the youngest daughter, who occupies the house and performs the necessary ceremonies at the post containing the shell emblematic of deceased's bones. After the *Niam Bah* the remaining property of the deceased can be divided by her or his descendants. No post is erected for children or for childless adults or, indeed, for any person who has not got material property to bequeath to descendants; such persons have the usual *post-mortem* ceremonies performed for them on the occasion of the *Niam Bah* of their mother. In the case of the *Niam Bah* of a man the ceremonies are dictated by the clansmen of the deceased, since they must be performed by his children, but these, belonging, according to the War matrilineal custom, to their mother's clan, are unacquainted with the precise ceremonial to be observed in the obsequies of persons of their father's clan.

As stated nowadays the *Niam Bah* releases the soul to return to the creator, but it seems possible

⁴ *Census of India*, 1931, I, i, pp. 399-400, 406; iii B, p. 4. MAN, 1927, 44; *Memoirs of the Asiatic Society of Bengal*, XI, p. 19.

in the light of certain Naga beliefs⁵ that this form of stating the belief is in part the result of Christian contacts which pervade the whole of the Khasi Hills. The form of the ceremony suggests that the intention was to provide a receptacle for the life-matter of the deceased and to secure its operation for the benefit of her descendants until it could be considered to have

⁵ *J.R.A.I.*, LVIII, 'Significance of Head-hunting in Assam.'

been reabsorbed into living members of the family, or possibly till it was no longer required and could be allowed to return to the general stock.

It is to be noted that the Sawara, like the Nicobarese and the Khasi, speak a language of the Austro-asiatic family and that there are strong traces among some of the Konyak Naga also not only of an Austro-asiatic vocabulary but of cultural elements, such as the shouldered hoe, generally found with the same associations.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Chinchem: a Study of the Rôle of Dream-Experience in Culture-Contact amongst the Temiar Senoi of Malaya. Summary of a communication by H. D. Noone, M.A., *Field Ethnographer, F.M.S. Government*, 7 March, 1939.

Shamans amongst the Temiar Senoi find their spirit-guides through dreams of association, in which they are endowed with powers, usually for healing sickness. A leading Shaman in a border group has introduced a ceremonial dance-and-song complex called *Chinchem*, obtained from a dream revelation on the tribal pattern. This has mobilized the morale of his group towards more effective adjustment in the contact situation. There are certain similarities with the Ghost Dance Revivals of North America.

Analysis of the behaviour of symbols in ordinary Temiar dreams showed when a chief symbol could become a potential spirit-guide; this could be expressed in terms of the degree of its identification with the dreamer, and other symbols in the dream. Some dreams of aspiring Shamans give additional evidence of this process. The power of spirit-guides depends upon what kind of diseases they promise to aid in healing, whether caused by intrusion (treated during Round-dance) or soul-loss (treated through Medicine-hut). In a very few dreams a spirit guide also identifies himself with the welfare of Society as a whole, or even with a veritable Cosmogony; the Shaman being chosen as interceder. *Chinchem* has developed from such a dream of intercession.

The originator of *Chinchem* was a Shaman and leader of a community settled in the foothills close to Malay, Chinese, Hindu, and even European contacts. From the point of view of their economy, the group had survived the transition stage; herding tame elephants and buffaloes, and 'panning' for alluvial tin, whilst still maintaining their plantations and trade in jungle produce. Signs of social disintegration and spiritual conflict, however, appeared:—frequent divorces; quarrels for leadership; increasing death-rate, especially among younger children.

In this situation, *Chinchem* became established. Both individual and cultural antecedents to the central dream experience of Datok Bintang are

assessed; in particular, the impact of Moslem ideas of conduct. The spirit of his dead wife becomes his spirit-guide, giving him new ethical values and therapeutic powers, which are now focused in the *Chinchem* dance and its cycle of songs. Although based on Temiar tradition showing Malay influences, *Chinchem* exhibits vital features new to both cultures. It is an instance of a force towards a new social integration, in the stress of culture-contact, which has arisen through the medium of dream-experience.

The Hadhramaut and its Past. Summary of a communication by G. Caton-Thompson, F.S.A., 21st March, 1939.

Until quite recently Europeans, for religious or political reasons, have met almost insuperable difficulties in penetrating the Hadhramaut hinterland. Consequently, until the Lord Wakefield Expedition, owing to Miss Stark's earlier journey in the country, was able in the winter of 1937-38 to obtain the consent both of the Aden authorities and of the local rulers, no systematic excavations in this region had ever taken place. Apart from inscriptions, torn from their contexts and therefore of little dating value, nothing was known of the pre-Islamic material culture of a land famous to classical and biblical writers for its rich merchandise in gums and spices.

A small inroad into a very large subject was made simultaneously from geological and archaeological approach. Epigraphy, without irreverence, was treated as an accessory after the act. Inevitably a choice lay between investigating a little thoroughly, or more superficially—between intensive work on a simple site or associated group of sites, thereby painfully limiting the chronological information; or a wider exploration, which with luck might roughly define the chronological contours at the expense of accurate data.

Unhesitatingly the choice was for the first, and the limited time available was spent clearing a buried temple of Moon Worship, twice enlarged, which yielded the much-needed plan of a South Semitic Sanctuary and many inscriptions but few portable objects; and more or less contemporary grotto-tombs which produced a valuable assortment of pottery, beads and miscellaneous small objects

of no artistic merit, and a small series of long-headed skulls, now studied by Dr. Morant. An inclusive date of about 300-0 B.C. with provisional elasticity of another hundred years at each end is proposed, but lacks conclusive stratigraphical backing. Miss Gardner mapped an irrigation system connected

with this community; and studied the recent geology of the valley system, which is dated in its later phases by palaeolithic implements of crude Levallois type found *in situ* in terraces at 10, 5 and 3 m. The original cutting of the valley itself is shown to be pre-pleistocene.

OBITUARY.

Sidney H. Ray: 28th May, 1858—1st January, 1939.

57 Sidney Herbert Ray was born in London on 28 May, 1858, and was educated at the British School at Abbey Street, Bethnal Green. On leaving school at the age of fourteen he spent four years in City offices where he acquired a knowledge of some



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European languages. He returned to his old school in 1874 as a Pupil Teacher. In 1880 he entered St. Mark's Training College, Chelsea, leaving after a successful course at the end of 1881. In January, 1882, he was appointed by the London School Board as Assistant Master in the Olga Street School, Bethnal Green, N.E., a position which he held till his retirement on 10 May, 1923. After years of ill-health he died on 1 January, 1939.

Ray married early in life, his wife always had poor health and for more than thirty years was an invalid and never did he fail to attend lovingly to her needs. Without her encouragement and

self-denial, Ray could not have accomplished the continuous output of publications. Ray's second marriage to an old friend brought him a true helpmeet during his last years. His widow survives him. Ray had no children.

Mr. Ray was always interested in the study of languages and his first notebooks indicate his tentative efforts in linguistics. This came to the notice of the late Archdeacon Palmer and others who gave him needful encouragement. At an early period he began to study Sanskrit and even launched on the study of Bantu languages, but his studies were somewhat desultory and he did not discover any particular branch that appealed to him as an object for continuous investigation. By chance he picked up in Shoreditch a second-hand copy of Mariner's 'Tonga,' in which he became much interested, and in order to compare Tongan with allied languages he bought a Rarotongan dictionary and got into touch with the Secretary of the London Missionary Society, who gave him several books on Polynesian and Melanesian languages. Thus began those memorable studies of the languages of Oceania; in a few years he became a recognized expert in this neglected field of linguistics and soon was acknowledged as an authority by German students.

In the early eighties Ray became acquainted with the Rev. R. H. Codrington, D.D., the well-known authority on Melanesian ethnology and languages, who was then Vicar of Wadhurst, Sussex. A life-long intimate friendship sprang up between the two. It is impossible to overrate what this friendship and guidance meant for Ray. It was due to Dr. Codrington's insistence that Ray read his first linguistic paper at the International Congress of Orientalists in London in 1886. Sketches of the grammars of the languages of the Southern New Hebrides were published in the *Journal of the Anthropological Institute*. Among other languages Ray fortunately had occupied himself with the existing vocabularies and translation of the Gospels of the languages of the Torres Straits.

On my return in 1889 from my first expedition to Torres Straits I naturally asked Dr. Codrington whether he would undertake the editing of the linguistic material I had collected. He was unable to do this, but he introduced me to Ray who, he assured me, was thoroughly competent to do so. I at once made an appointment to meet Ray and thenceforward we remained firm friends. Our joint work on the languages of the Torres Straits, of which by far the larger part was written by Ray, was published in the *Proceedings of the Royal Irish Academy* in 1893 and 1897.

In 1892 Ray read a paper on *The Languages of British New Guinea* at the Ninth International Congress of Orientalists, which was subsequently published with additions. In this communication Ray demonstrated, for the first time, the existence of a group of languages in New Guinea, which are spoken by the original inhabitants of that island and belong to a very different linguistic family from the dialects of the Melanesian immigrants who have colonized various coastal regions of New Guinea. These non-Melanesian languages were appropriately termed 'Papuan' by him. In 1896 Ray published in New Zealand and Leiden a paper dealing with the common origin of the Indonesian, Melanesian, and Polynesian languages.

A glance at the list of Ray's publications will show that during the decade 1887-1897 he was making himself a master of the languages of Oceania, and more particularly of those of Melanesia and New Guinea. The Rev. Dr. Lorimer Fison, the well-known missionary and ethnologist, once told me that Dr. Codrington stated to him that Ray possessed a wider knowledge of Melanesian languages than he himself had, and this from the man who had published the authoritative book on Melanesian languages!

When preparing for my second expedition of 1898-1899 my first care naturally was to secure Ray as a colleague, and whilst he was considering the invitation I approached the London School Board. They merely gave Ray leave of absence for a year without stipend and with the loss of that year in regard to pension, but they promised to reappoint him to his old post on his return. Ray thoroughly investigated the two distinct languages which are spoken in Torres Straits, and took the opportunity of studying two Australian languages from natives of Cape York with whom he came into contact. He was also able to make a preliminary study of the Kiwai language, and later on he gained a knowledge of the Motu and allied languages of the south coast of New Guinea. I took Ray with me to Sarawak, on the invitation of Dr. Charles Hose, where he was able to study several Indonesian languages. Ray had to continue his elementary teaching on his return to London, but he devoted his spare time, as he had always done, to linguistic studies. In 1907 he published (Rep. of the Cambridge Anthropol. Exped. to Torres Straits, Vol. III. Linguistics) a monumental study of the languages of Torres Straits with a valuable survey of the Papuan and Melanesian languages of British New Guinea. This memoir met with a very favourable reception. Dr. C. O. Blagden in the *Journal of the Royal Asiatic Society* described it as "a model of the way in which such material should be arranged and handled."

The University of Cambridge recognized the great value of Ray's researches by conferring on him the degree of M.A. *honoris causa* on 12 December, 1907. In his Latin speech, the Public Orator, Dr. J. E. Sandys, said: "It is an assistant master at an elementary school, a man long since worthy of a more fitting rank, upon whom on account of his unique linguistic skill we to-day confer the honorary degree of master of arts. . . . All the material

"concerning the sundry languages of the native inhabitants, which the leader collected on his first expedition and brought home to England, there was none who could better explain and interpret than the gentleman who is now present; for, captivated by his own natural love of knowledge, he had long studied at home the languages spoken in those islands, though the places themselves he had never with his own eyes beheld. When the second expedition was sent out, he was himself made a member of the party, and brought back in triumph from those islands manifold philological spoils, which it is now our privilege to view and admire, set forth in a monumental work which has recently been published by our University Press. It is not my duty to-day to detail further to you all his investigations concerning the comparative philology of a multitude of languages, which are to be found in this great work; rather, now that we have praised according to his merits a man so worthy of eulogy, at the conclusion of my eulogy let me borrow the conclusion with which the stories that he collected in those islands so frequently end—a phrase not unworthy of the ancient Romans—and say: 'Enough; this is the end of our speech'."

The remark by Dr. Sandys that Ray had long deserved a position appropriate to his exceptional gift is only too true. Unfortunately there was no University or Institution in the British Empire that had the means or the enterprise to give Ray a teaching or other appointment which would have enabled him to prosecute his studies under favourable conditions unfettered by those financial worries and routine duties which severely crippled his work.

Mr. Ray had planned a comprehensive monograph on the grammar and the languages of Melanesia in which the local variations were to be compared and traced to their sources. This was designed to comprise several volumes, the material for which had been collected and merely awaited the leisure for final collation and discussion and the opportunity for publication. Through the co-operation of the Universities of Melbourne and Cambridge, the first volume was published in 1926, as 'A Comparative Study of the Melanesian Island Languages.' It is difficult to exaggerate the scientific worth of this instalment of the result of the work of a life-time, or the loss to comparative linguistics of the non-publication of the remainder.

Mr. Ray also had a wide knowledge of the literature of linguistics and he had frequently been consulted with regard to African and American languages. In 1913 he was appointed by the London County Council to lecture at the Horniman Museum on 'The Languages of the World.'

In addition to his purely linguistic studies, Ray gave an enormous amount of time in supervising and editing translations of books of the Bible and Service books published by the British and Foreign Bible Society, the Society for Promoting Christian Knowledge, and various Missionary Societies; there was no other man in the Empire who possessed the requisite extensive and precise scholarship to undertake this tedious labour.

Mr. Ray joined the Royal Anthropological Institute in 1888, and has contributed many papers to the *Journal* and to *Man*; he served on the Council for a number of years, and was awarded the Rivers Medal in 1928. By a special resolution of the Royal Geographical Society he was allowed the honorary privileges of a Fellow; he was an Honorary Life Governor of the British and Foreign Bible Society, in appreciation of services rendered to the Society in editing translations of the Scriptures in various Oceanic languages; an Honorary Member of the Polynesian Society, New Zealand; a Corresponding Member of La Société d'Etudes océaniques, Tahiti, and of the Anthropologische Gesellschaft in Wien. Imperial appreciation of his work was made in 1927 when His Majesty the King honoured him with a pension from the Civil List, "in recognition of his service to literature and the study of ethnology."

Noticeable characteristics of Ray were his humility and an absence of self-seeking. He was always ready to assist other students, and I gratefully acknowledge the help he has constantly given to me.

A. C. HADDON.

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A Grammar of the Fuyuge Language, Papua. Translated and edited from the MS. of the Rev. Father Egidi, S.C., in R. W. Williamson: *The Mafalu Mountain People of New Guinea*, London, 1912, 307-331.

The Kazukuru Language of New Georgia, by J. H. L. Waterhouse: Notes by S. H. Ray. *MAN*, 1931, 133.

A Grammar of the Kiwai Language, Fly Delta, Papua, with a Vocabulary by Rev. E. B. Riley, Port Moresby, 1933.

Many reviews, over 90 in number, are of value as they bear directly on linguistics and in some cases they are criticisms of an unscientific treatment of linguistics.

REVIEWS.

ASIA.

Transjordanien: Vorgeschichtliche Forschungen.

By Hans Rhotert. Stuttgart. 1938. xvi+251 pp., pls. 30, maps 3.

This is the report of the twelfth Deutsche Inner-Afrikanische Forschungs-Expedition (D.I.A.F.E. XII) organized by the late Professor Frobenius. D.I.A.F.E. XII comprised three distinct undertakings:—

1. Researches in Transjordan, October-December, 1934.
2. A journey to the Egyptian oases west of the Nile, the crossing of the Libyan desert from Kharga to Kufra, and a journey to Tripoli, January-June, 1935.
3. A journey through Tunisia, Algeria and Morocco, June-July, 1935.

It is intended that the complete report shall appear in three parts, of which the present volume is the first.

The object of the journey to Transjordan was the more detailed examination of rock-engravings, presumed to be prehistoric, discovered in 1932 by Mr. and Mrs. George Horsfield and Dr. Nelson Glueck at Kilwa in the Jebel Tubaiq. (*Prehistoric Rock-Drawings in Transjordan*. Amer. Journ. Archaeology, 1933, xxxvii, pp. 381 ff.) This site lies in the desert of Eastern Transjordan, 185 km. E.S.E. of Ma'an, near the Hejaz frontier, and has rarely been visited, owing to its inaccessibility and the lack of water on the spot. Gertrude Bell, who passed through it on her way to Hayil in 1914, recorded in her letters the existence of ruins, and these formed the objective of the Horsfield-Glueck expedition, which was able to establish that the buildings belonged to a Christian community of about 1000 A.D. An

examination of a small sandstone hill (afterwards baptised the 'Horsfieldberg' by the Frobenius expedition) a few hundred yards from the cloister led to the discovery of a large number of drawings of animals, chiefly ibex, incised on the smooth surfaces of the rock. These engravings had for the most part weathered to the colour of the native rock, and in one place they were covered with Thamudic inscriptions of about the 3rd century A.D. weathered only to a much lighter yellowish tint. The discoverers concluded that the engravings were for the most part of prehistoric date, an opinion which was confirmed by the Abbé Breuil from an examination of their photographs. Owing to lack of water they were able to stay only one day at Kilwa, and on this occasion no stone implements were collected.

The Frobenius expedition, under the leadership of Dr. Rhotert, was organized for a much longer stay, and was able to devote six weeks to Kilwa, in which time the engravings on the Horsfieldberg, and others discovered in the neighbourhood, were recorded in photographs and drawings, and a large number of stone implements (about 6,000) were collected. The present volume, in which these results are described, is divided into five sections; the first describes the journey by car and steamer from Frankfurt to Transjordan, the second, the work in Jebel Tubaig, the third, the stone implements, the fourth, the rock-engravings of Kilwa, and the fifth, a number of small additional journeys, including one to the Wady Rum.

The finds of stone implements were made over an area of roughly 10 km. from north to south, and 9 km. from east to west, with the Horsfieldberg as centre. They are all from the surface, a number of trial excavations proving fruitless, but a study of distribution and physical state enables Rhotert to distinguish three main groups.

1. *Lower Palaeolithic.* These were found mainly in depressions between the hills, and were thinly scattered over rather wide areas. The majority are more or less heavily abraded. Rhotert distinguishes Chellean, Acheulean, Levalloisian and possible Mousterian types, but the drawings of Chellean hand-axes (p. 62) suggest that some of these may possibly be Late Acheulean, since they are comparable with many of the rougher specimens of this date from the Wady el-Mughara. On the other hand, the beautiful twisted ovate (Pl. 8, No. 5) described by Rhotert as Acheuleo-Levalloisian may well be Middle Acheulean. The Levallois flakes and cores are of types already well known from the Transjordan desert; the Ashmolean Museum has a number of specimens collected by Doughty from the region of Ma'an, and this stage is well represented in the material (unfortunately still unpublished) obtained by the Field Museum expedition in 1928.

2. *The Horsfieldberg industry.* This was obtained from a natural platform, 2-3 m. high and 75 m. in diameter, immediately to the south of the Horsfieldberg. The platform was thickly strewn with implements and cores, all practically unabraded. The leading types are burins, small elliptical bifacial tools, flaked axes and long tangled arrow-heads. Rhotert tentatively suggests that a part of this material may be Upper Palaeolithic, but places the bulk of it in a period stretching from the Mesolithic to the Bronze Age. If this work had appeared just one year later the author would have had access to material, shortly to be published, excavated by Mr. John Waechter at the Wady Dhobai, a desert site some 100 km. to the north-west of Kilwa, and would undoubtedly have recognized its kinship with the industry of the Horsfieldberg. In the light of Mr. Waechter's finds there can be no doubt that the various types—burins, arrow-heads, axes—found on the Horsfieldberg

site belong to a single industry of Mesolithic date, closely related to the pre-pottery culture of the oldest levels of Jericho. This is further confirmed by the presence at the Horsfieldberg of a peculiar type of nucleus found also at Wady Dhobai and Jericho. (J. Garstang, J. P. Droop, J. Crowfoot. *Jericho: City and Necropolis*. Liv. Ann. Arch. Anthr. xxii + 143 pp. ff. 1935. J. Crowfoot, *Notes on the Flint Implements of Jericho*, 1936, Id. xxiv + 35 pp. ff. 1937.)

3. *Kilwa Culture.* Some 3-4 km. to the N.E. of the Horsfieldberg is a group of sandstone ridges capped with a thick layer of broken chert, the raw material of the majority of implements of all periods found at Kilwa. In addition to the unworked blocks of chert these ridges are thickly strewn with flakes and artefacts, mostly of considerable size, and practically unabraded. The leading types are bifacial tools, ranging from hand-axes typologically indistinguishable from Acheulean specimens, through long elliptical forms to leaf-shaped blades (the latter relatively uncommon). In addition there are picks and large crescentic scrapers worked on both faces. Rhotert rightly resists the temptation to separate the hand-axes from the rest and classify them as Lower Palaeolithic, and he points out the resemblance of this industry to the so-called Campignian of Palestine. In this connexion reference might have been made to the surface site of this type found by Turville-Petre (*Researches in Prehistoric Galilee* (Mem. Brit. Sci. Arch. Jerusalem), London, 1927) at the Wady Farah in Northern Galilee which shows the same association of hand-axes with picks and later forms. Rhotert suggests that his industry, which he names *Kilwa-Kultur*, may be closely linked with that of the Horsfieldberg. He supposes that in prehistoric times the ridges were covered with humus, and that the large rough bifacial tools were used for digging out the raw material from which the more delicate industry of the Horsfieldberg was made: the Kilwa-culture would, in fact, be the tool-kit of Mesolithic miners. This is an interesting theory, which needs to be confirmed by further evidence.

The rock engravings of Kilwa fall roughly into three groups, of which the oldest is concentrated on the Horsfieldberg. This oldest group consists chiefly of pictures of ibex, generally portrayed singly and varying from 1 m. to 1.20 m. in length. The technique, as the original discoverers had already observed, consisted in drilling or punching a series of holes with a burin and then making a continuous line by breaking down the rock surface between the holes. Some of these early engravings, notably the wounded ibex (Pl. 10, N. 2) have considerable artistic merit, but others are very stiff and clumsy. Within this first group it was possible to distinguish several phases by means of the study of superpositions and styles. In addition to the numerous ibexes there are pictures of an ox, two camels, an (?) ichneumon, a (?) hare, a very schematic human figure, a human copulation scene, and an enigmatic beast identified by Breuil as a leopard, but which is plausibly suggested by Rhotert to be a lizard. This latter figure has superimposed on it the Thamudic inscriptions described by the original discoverers. The second group consists of small engravings of animals in groups, some with engraved outline and others chiselled out in intaglio fashion. They include a scene with ibex and dogs which Rhotert considers to show an influence from vase paintings. The third group, which consists of scrawled drawings, often of camels, is contemporary with a number of inscriptions of which the earliest are Thamudic. This group was found mainly in the course of a journey to El Quweira and the Wady Rum.

Rhotert considers that the first two groups are prehistoric, and although there is no direct evidence

of this, it is at least very probable. He links the engravings of the Horsfieldberg with the industry found close at hand, and places the oldest group in the Mesolithic and the second in the Bronze Age. Since we may now assign the whole of the Horsfieldberg industry to the Mesolithic it will be necessary to reconsider either the dating of the second group or its connexion with the industrial site. Comparing the oldest group with certain North African rock-engravings (e.g. Fezzan) he suggests that they lie on the eastern circumference of the North African Late Palaeolithic or Mesolithic art province, while for the second group he very tentatively proposes north-eastern connexions, comparing it with rock-engravings from Demir Kapu and sherds from Tepe Gyan. His inclusion of Natufian art and the oldest Kilwa group in the same North African province and his assumption that the two are closely related is not very securely grounded. In the first place Natufian art, as far as is known at present, is exclusively plastic, in the second, the Mesolithic industry of Kilwa is not, as he implies, related to the Natufian (which has not so far been found east of the Jordan) but appears to be a completely independent culture, which penetrates west of the Jordan only at the close of the Mesolithic (e.g., Jericho).

It remains only to note that a considerable number of small stone circles were found at Kilwa, but their relation to the stone industries and engravings remains uncertain. Dr. Rhotert points out that any habitation of the site however transitory would probably leave such traces, and instances the stone wind-screens erected by his own expedition, and the stone circles left when their tents were struck.

Dr. Rhotert is to be congratulated on a very sound piece of work. The description of the site and the material is clear and objective, and the theories put forward are reasonable in themselves and presented without dogmatism. The illustrations are excellent, and there is a useful map and table showing the distribution of the different industries. The only point which can seriously be criticized is the omission of a classified inventory of implements showing the number of specimens found under each heading. Although such an inventory is indispensable for the comparison of one Stone Age site with another the number of excavators who provide one in their reports is still much too small.

D. A. E. GARROD.

Living with Lepchas. By John Morris. London: Heinemann, 1938. xiii + 312 pp., map and illustrations. Price 15s.

Major Morris made his investigations into Lepcha society as William Wyse Student (Cambridge University) in Social Anthropology. *Living with Lepchas* is the first-fruit of these investigations and claims to be regarded merely as a book of travel, "a plain unvarnished" description of some four months' residence in a Lepcha "village," and not as a scientific study of Lepcha culture. The author has avoided formalist anthropology; he gives us no detailed information, for instance, of the terms of relationship. On the other hand he does tell us such details as that the same form is used for both son and daughter, for both younger brother and younger sister; male or female prefixes being added if requisite, a peculiarity common also among the Kuki-Chin tribes of Assam and Burma. He refers to the use of a special vocabulary in talking to very young children, a practice shared with some Naga tribes. He gives a description of the method of arrow-release, and chapters on Magic and Spells, Festivals, Family Life, the People, Sex, etc. In short, the volume is of great ethnographical value and fully entitled to be called scientific.

Particularly valuable and interesting is his approach to Lepcha psychology by means of individual biographies, and likewise anything he has to tell us on the psychological outlook of Lepchas generally, since it is so markedly different from that of primitive tribes in general, at any rate in Asia, and from that of their neighbours in Nepal, Bengal, and Assam, in particular. The Lepchas have, one supposes, gone about as far as any human society can towards eliminating from its members not only aggressive behaviour, but almost any kind of reticence or jealousy over sex, so that they afford a far better opportunity than most primitive tribes for an approach in the manner of Benedict's *Patterns of Culture*, which Major Morris clearly admires. A man has the right to co-habit with the wife of any one of his own elder brothers, or of his father's younger brothers, or with her younger sisters; and also, provided she herself desire it, with any woman in the same classificatory relationship.

So many minor points call for remark that one can only pick out one or two. It is interesting to learn that the reason for wearing snailshells as an ornament is to afford a hiding place for the soul if attacked by an evil spirit. The reviewer is familiar with the practice in Assam but has never succeeded in extracting a reason for it. The pellet-bow and the flute one would expect to find, but a very mountainous environment seems hardly the one to encourage, far less engender, stilt-walking as a pastime, though it occurs in Assam. Lepcha exogamy is described (p. 64) as "of a special kind" in that it permits a man to marry a woman of another clan, provided she has no ancestress of her husband's family within five generations. There seems nothing very peculiar about this. It is very ordinary exogamy to impose a modified bar to marriage with affines, together with a complete bar on marriage with agnates. Major Morris is in error about the habits of the Himalayan bear (p. 194), who is far from being a clean eater; and his zoological terminology is by no means impeccable. The 'chameleon' to which he refers is probably the so-called 'bloodsucker' lizard which changes colour: there is no chameleon in India, and his 'armadillo' is obviously the pangolin. This makes one feel doubtful about the 'pheasant' (p. 244) with a short tail and black face. If indeed a pheasant it is presumably the 'cheer,' but it sounds much more like the black partridge. Since fraternal twins may be either of the same or of different sex the terms 'fraternal' and 'identical' ought not to be used (p. 211) in Lepcha categories of twins which they cannot represent.

These, however, are minor details. The book as a whole gives of a very interesting people an intimate, careful and vivid account, from which a sense of humour is never lacking. And an account of the Lepchas was overdue. Sterility, whether due to excessive potatoes, to their sexual habits, to both, or to some quite different cause, is rife among all but Christian converts. The old tribal life therefore seems ultimately doomed, and meanwhile has fallen into the baneful hands of the Hindu moneylender, who squeezes it for cardamoms. Major Morris' account does more than whet the appetite for the full ethnographical harvest which he promises us later, of the value and interest of which it is an ample guarantee. The book is accompanied by a map, an index, an excellent bibliography and 77 admirable photographs taken by the author. J. H. H.

Frühchinesische Bronzen und Kultdarstellungen.

By Carl Hentze. Antwerp, 1937. 168 pp., 208 figs, 19 pl.

The present book is to some extent the continuation of the author's work reviewed in MAN, 1938, 193,

though almost entirely devoted to the early Chinese bronzes and their religious signification. The book is in two parts. The first contains chapters on the cicada, the *Tao Tieh* mask, and certain other beings supposed to be symbols of resurrection; the second deals with the tree of life, the tree of the sun, and related subjects.

The chapters on the cicada are undoubtedly the principal section. Prof. Hentze starts with the interpretation of the cicada by the Chinese themselves, such as Wang Ch'ung, who writes (in *Lung-Hêng*, transl. by A. Forke, I, p. 200): "Prior to its casting off its exuviae, 'a cicada is a chrysalis. When it casts them off, it leaves 'the pupa state, and is transformed into a cicada. The 'vital spirit of a dead man leaving the body may be 'compared to the cicada emerging from the chrysalis.' The conception of the cicada as a symbol of the resurrection might have been common among the Taoists, whereby the author refers to Ko Hung, who died when he was eighty, leaving his body as an empty cover without weight, which indicates that Ko Hung had cast off his earthly body like an insect leaving its chrysalis, before he became an immortal ghost (p. 14). Now, we used to be familiar with those small jade carvings representing a cicada which were put into the mouths of the deceased, a custom which has now definitely been proved by the Japanese excavations of tombs of the Han-period in Korea (p. 14). Professor Hentze applied the altogether new method of studying the zoology and biology of the insect and comparing its various stages of development with the decorative designs occurring in the early bronzes. He then made the extraordinarily interesting discovery that all those biological stages are

represented by designs which hitherto used to be considered either as stylized beings of uncertain signification or else as merely decorative ornaments (p. 35, ff.). This amazing discovery, which throws much light on the early Chinese decorative art, is illustrated by numerous very elucidative figures. On the other hand, the author found that the cicada occurs as an ornament in the outstretched tongue of a monster presumably identical with the demon of the dark and, at the same time, of the earth (p. 37, ff.), and he also shows the connexion between the cicada and the *Tao Tieh* mask (cf. MAN, 1938, 193). These brief notes may suffice to give evidence of the rich material of new observations and sound conclusions here offered.

Professor Hentze's book is a pioneer work which may inaugurate a new era of the study of both the decorative art and the religion of ancient China, ranking with Creel's recent publications, and still more important on the religious side. The American parallels with Chinese decorative art are not considered at length, since they have actually very little to do with the present subject. As on p. 87 Professor Hentze mentions only one out of the many decorative principles of the North-west American Indian art, I may refer to Boas's *Primitive Art* as well as to my papers in *Wiener Beiträge zur Kunst und Kulturgeschichte Asiens*, V, 1931, p. 40, ff., and MAN, 1936, 3, to show that the phenomenon described by Hentze on p. 88 holds good also for North-west America. The various technological and artistic principles displayed in both ancient China and North-west America are almost entirely identical. But the cautiousness with which the learned author suggests mere 'resemblances' here (p. 142) must be welcomed. L. A.

CORRESPONDENCE.

Clan Monopoly of Personal Names. (Cf. MAN, 1939, 2)

61 SIR,—With reference to Mr. T. C. Das's note on the clan monopoly of certain names among the Purum Kukis (MAN, 1939, 2) I write to point out that the existence of an hereditary right in personal names is implied also in the Lhota Naga custom by which the price to be paid on the death of a married woman, whose children or descendants survive her, to her agnates, by her husband or his male heirs, is always accompanied by a small sum known as 'name-buying,' *ming-eshi*, which entitles her husband's family to utilize her name for descendants. The Lhota 'death price,' *echhiman*, is clearly the precise equivalent of the Kuki 'bone-price,' *longman*, which, like *echhiman*, is not payable when a woman dies without surviving offspring. It is probably significant that the Ho tribe of Chota Nagpur on giving a daughter in marriage always stipulate that after death her bones shall be returned to be buried in her family burying place, a stipulation which is always acceded to, but which has in practice become a mere form, as it is never carried out, nor even expected. I think there can be little doubt but the payment of *longman* is a compensation to the clan of the deceased for the loss of a fertility-unit. If the woman prove effectively barren there is no loss, and therefore no payment; in the case of the Thado Kuki there is no payment if the lobe of her ear be split, since it prevents her from rejoining her kindred in the next world. On the other hand, were a fertile woman's bones returned to the clan-burial-place of her own clan, her soul or life would revert to the common life-material of that clan and so promote future births in that clan. Hence compensation must be paid to the clan that loses her.

It seems likely too that ideas of individual reincarnation may also be involved in clan titles to particular names. The name chosen for a Lhota "is invariably one

"which has been borne by a member of the clan before" (Mills, *The Lhota Nagas*, p. 145), while the name of one member of any family is never given to another member of the same family during his or her lifetime, since one of the two would die if this were done.

J. H. HUTTON.

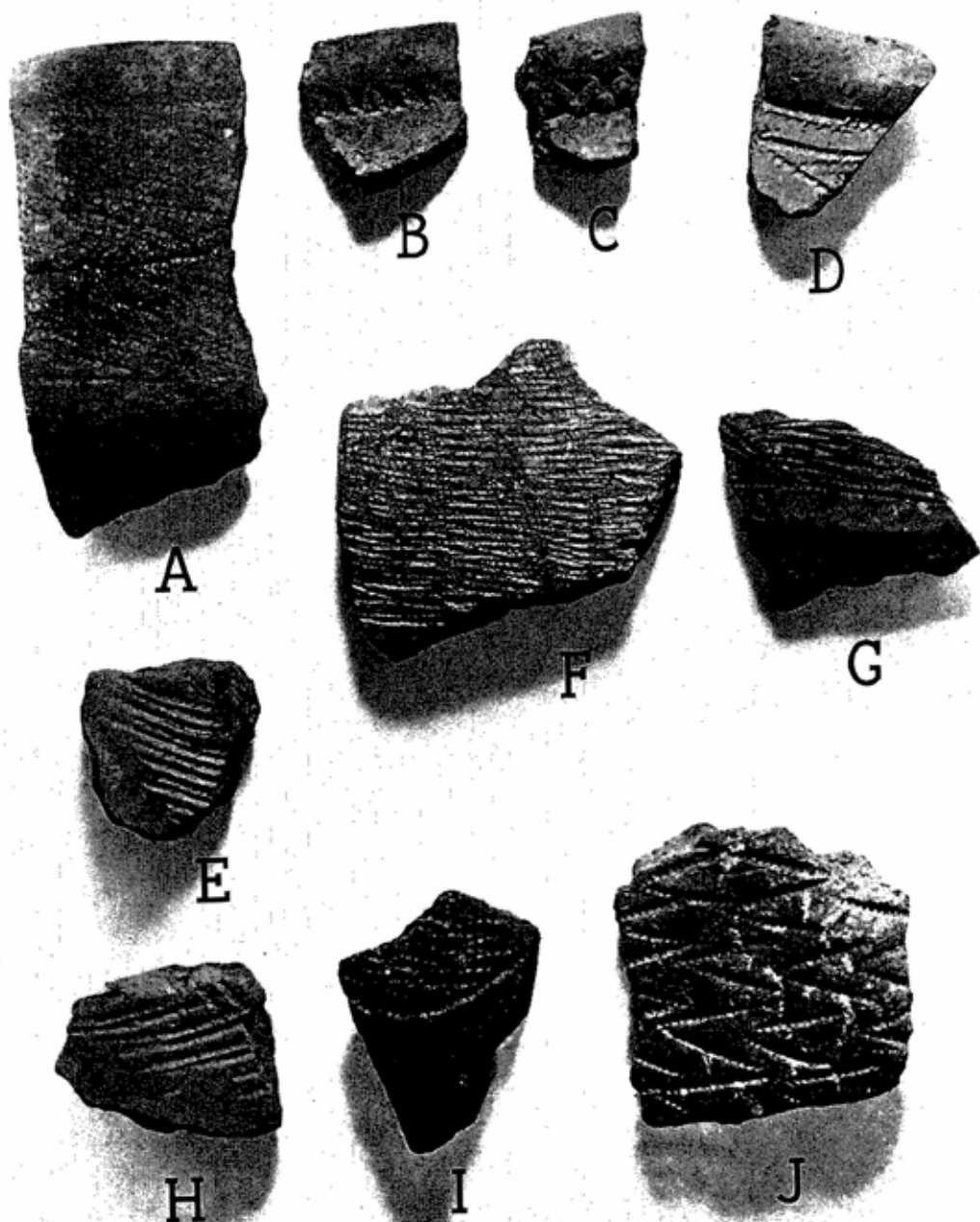
Insect-chasing: Game or Superstition? (Cf. MAN, 1938, 145.)

62 SIR,—In MAN, 1938, 145, is described 'A Game from the Great Western Desert of Australia.' Is it a game proper, or a mere superstitious practice?

A similar curious practice obtains in Lower Bengal. When black (or rather dark-blue) beetles enter the living rooms humming at night, it is the practice to press closely the tips of one's own thumbs and forefingers together, and point them upwards in the belief that the beetle will come upside down soon. It thus remains helpless, to be brushed out of the room with a broomstick. All the persons in the room are expected to close their fingers; but sometimes they do not. If the beetle takes a long time to come down, then all the persons place their hands (with their thumbs and forefingers closed as described above) close to each other and thus form a circle in the belief that it is sure to come down now. Sometimes one's right hand with fingers closed is placed over the left hand with fingers similarly closed.

I have observed the practice in the districts of Eastern Burdwan, Nadia and Twenty-four Parganas. The practice is not universal; it is confined mainly to the lower agricultural classes, though the upper classes are not free from the practice. It is perhaps falling into desuetude.

I have not been able to find out how the belief originated. JATINDRA MOHAN DATTA.
Calcutta.



FRAGMENTS OF POTTERY FROM THE DEEPER LEVELS OF THE
MUMBWA CAVE, NORTHERN RHODESIA.

MAN

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ORIGINAL ARTICLES.

Africa South

With Plate E.

Wells

A STUDY OF THE CERAMICS FROM THE DEEPER LEVELS OF THE MUMBWA CAVE, NORTHERN RHODESIA. By L. H. Wells, M.Sc., M.B., B.Ch., Lecturer in Anatomy, University of the Witwatersrand, Johannesburg.

63 *Introduction.*—The excavation of the Mumbwa cave, Northern Rhodesia, described by Dart and del Grande (1931), yielded results which have been much discussed and whose correct interpretation is essential for the elucidation of the prehistory of Southern Africa. Unfortunately, a great part of the material recovered and lodged in the Ethnological Museum of the University of the Witwatersrand was destroyed by fire before a systematic restudy of its various aspects could be undertaken. It is all the more desirable, therefore, that a detailed account of such material as survives should be put on record.

That part of the collections which, having been deposited in the Anatomical Museum of the University, escaped destruction, included, in addition to the human skeletal remains, part of the cultural material found in association with the deeper burials. Among this are the ceramic fragments which form the subject of this study.

In the excavators' report it is pointed out that, while fragments of pottery occurred most abundantly in the uppermost part of the deposit, they were found also in smaller quantities as low down as the very base of the Late Stone Age stratum, at a depth of approximately two metres. It is these sherds from the deeper levels which have survived. Since from their position in the deposit they would appear to be of considerable antiquity, their relation to other African ceramics is therefore not the least of the problems raised by the Mumbwa finds. This question has been summarily discussed in previous publications both by myself (1935) and by Laidler (1938). The material, however, calls for more extensive description than is given in these previous studies, and it is the purpose of this report to furnish such a description.

DESCRIPTION.

1. *Fabric and Firing.*—The clay of which these sherds are composed contains numerous angular and rounded fragments of quartz and other minerals, ranging from 1 mm. up to 5 mm. in diameter. These appear to be purely accidental inclusions indicating that the clay was utilized without special preparation.

The sherds range from 8–16 mm. in thickness, the average being about 10–12 mm. Even small fragments are, however, of uneven thickness. It is evident that this pottery was not wheel-made. The relatively large size of the vessels suggests strongly that they were shaped by process of building up and not by modelling from a single mass. There is, however, no direct evidence of this such as is sometimes furnished by fractures along the junction of imperfectly united segments.

The firing of the ware has been sufficient only to effect cohesion of the clay. The core of the

sherds is of a dark grey colour and somewhat crumbling in consistence; the surface layers are firmer in texture and lighter in colour, ranging from a pale grey through various shades of brown to a light red.

2. *Shape*.—The vessel whose form is most completely preserved is about $5\frac{1}{2}$ inches in maximum diameter and the same in height. It has a very distinctive profile (Fig. 1, A). The basal portion is markedly tapering, and is demarcated from the upper portion by a sharp carination; unfortunately the manner in which it was completed below cannot be determined. The upper segment is almost cylindrical, having a slight convex taper from the carination towards the aperture. The rim is set vertically, with a slightly convex thickening on its external surface; the lip is bevelled internally.

Two other fragments (Fig. 1, B and C) show the same strongly marked carination and appear to have been somewhat similar in general form to the first example. Both, however, are of

larger diameter (seven inches or more), and they show sufficient individuality in finish and decoration to prove that they belong to different vessels.

The collection contains, however, fragments of other vessels decidedly different in form from those just described. The rim shown in Fig. 1, D is that of a narrow-mouthed vessel with rounded shoulders. It has no neck, but a broad convex moulding surrounding the aperture. There are two other rim fragments in the collection (Fig. 1, E and F). Both are so small that their exact orientation cannot be ascertained, but they agree in showing a convex thickening of the exterior of the rim above a concave necking. This concave necking is shown also by some fragments of yet another vessel (Plate E, G and H).

In the material preserved there is no evidence of bases, of handles or lugs, or of spouts.

3. *Finish and Decoration*.—The surface in all the sherds is smoothed, and in one or two appears genuinely polished or burnished. This burnish or gloss is most apparent on the inner surface of the sherds.

Many of the fragments show decoration, invariably in the form of impressions made on the wet clay. The commonest variety is composed of series of small rectangular impressions, executed with a notched instrument. Examples of the patterns produced in this way are shown in Plate E, A, D, E, F, I and J. In the first three cases the close-set impressions cover a large portion of the surface, and in Plate E, E especially they are so closely massed as to suggest at first glance the imprint of a textile. On the other hand, the remains of the pattern in Plate E, D suggest a hatched triangle motive limited to the zone immediately below the rim. Plate E, J represents one of the several sherds in which the field is covered by a series of zig-zag lines of stamp impressions, more or less regularly spaced. The sherd shown in Plate E, I reproduces the close-set patterning of the first three specimens, but is distinguished by the curved line bounding the decorated area.

Other types of impressed decoration are shown by Plate E, B, C, G and H. Of these, the first two show variations on the theme of alternating triangular impressions, producing a zig-zag ridge in false relief. The indentations of Plate E, C were evidently executed with an angle of the comb-like implement used for producing the

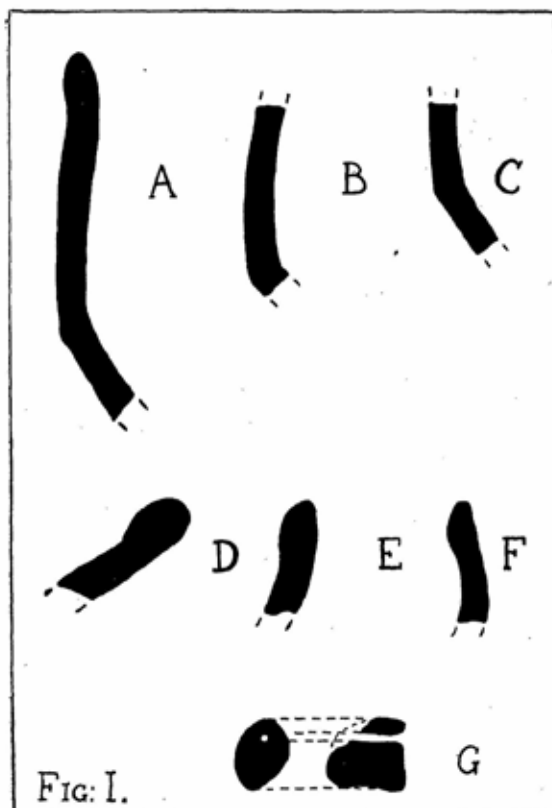


FIG. 1.

PROFILES OF POTTERY FROM THE MUMBWA CAVE.

rectangular impressed ornament; this has left parallel ribs on one surface of the indentation. Those of Plate E, B, however, were presumably executed with a special stylus. Plate E, G and H, two fragments evidently from the same vessel, show a pattern formed by the impression of short lengths of a twisted cord, arranged to form a herring-bone motive. Laidler (1938) apparently regards this as a 'bangle,' i.e., coiled-wire impression, but Mr. J. F. Schofield, who has recently examined the material, agrees with me that it is a true cord impression.

4. *Miscellaneous.* — Reference may here be made to another object of pottery from this site. This is a rudely cylindrical *bead*, 23 mm. in length and 15-18 mm. in diameter, with a very eccentrically placed perforation (Fig. 1, G). It is made of exactly the same ware as the potsherds.

The only records of clay beads in Southern Africa of which I am aware are those furnished by Berry (1937) for a surface site in Southern Rhodesia, and by Beck (1937) for Mapungubwe in the Northern Transvaal. The examples described and figured by these authors are, however, considerably different from the Mumbwa specimen.

This bead, to which no reference is made in the excavators' report, adds yet another to the varieties of personal ornament found on this site. These already included, besides ostrich-egg-shell beads and pendants, segments of the otic bones of various animals, and perforated carpal bones and epiphyses of long bones.

DISCUSSION.

The pottery from this deposit is clearly a homogeneous and well-characterized type. Comparison between it and that from the more superficial levels is limited at present to the photograph of the latter included in the excavation report. This clearly shows fragments possessing many of the distinctive features of the remains just described, the carinated form of Fig. 1, A-C, the triangular indentations of Plate E, B, the zig-zag stamped pattern of Plate E, J. Though the photograph also shows forms and patterns not identifiable among the material from the deeper deposits, there is strong evidence of a community of ceramic types between these different levels. This is in agreement with the homogeneity of the lithic culture from the same horizons, stressed by the excavators, and with

the more recently determined continuity of the associated physical remains.

It may be stated with confidence that there is no resemblance between this pottery and that of the modern Ba-Ila people of the locality, as described by Smith and Dale (1920). Local comparison cannot be carried farther owing to our ignorance of the ceramic archaeology of Northern Rhodesia. Consideration must therefore be given to possible parallels over a wider field.

In texture, in the moulding of the rims, and in the predominant stamped decoration, the Mumbwa pottery presents certain resemblances to the Zimbabwe Class A (Caton-Thompson, 1931). These are, however, of a very general nature, though it must be admitted that similarities of an equally general character have been used in the past as evidence of relationships between groups of South African pottery. In the case of the Zimbabwe Class A, Miss Caton-Thompson indeed has observed that pottery with these features "could probably be proved to have a 'world-wide distribution.'" Through the kindness of Fr. T. Gardner, I have lately had the opportunity of examining a large collection of pottery from the Gokomere cave, 28 miles from Zimbabwe, which had been identified by Miss Caton-Thompson as Class A, and I have also examined Class A sherds from Zimbabwe itself in the collection of the South African Museum, Cape Town. The study of this material has convinced me that there is no close relationship between Class A and the Mumbwa pottery, such as Laidler (1938) has endeavoured to establish. The suggestion I had previously made (1935) that the Mumbwa pottery and Class A may possibly be "developments from a single source of ceramic inspiration" represents the utmost that can be ventured on this topic.

No well-characterized ceramic group from South Africa shows a greater degree of resemblance to the Mumbwa material than does the Zimbabwe Class A. In this connexion Mr. Schofield has pointed out to me the great significance of the use of true cord and not of coiled-wire impressions on this pottery. Such impressions are extremely rare on South African pottery, and afford further evidence of the distinctive character of the Mumbwa material.

It is to be noted also that, at least in Southern Rhodesia and the Transvaal, pottery is not

typically found in Stone Age deposits, but only superimposed on them. The rare exceptions to this rule result from disturbance of the deposits or occasionally from an overlap of Stone Age and Metal Age culture.

A possible instance to the contrary, however, is suggested by a find made by Miss Caton-Thompson at Dhlo-dhlo. In the earth underlying the foundations of this ruin there were found, in association with stone implements assigned to the Upper Bambata industry (the closing phase of the Middle Stone Age) "small fragments of pottery" in a coarse, rough, red-brown, undecorated ware. I do not see any reason to doubt," continued Miss Caton-Thompson, "that these "are contemporary with the implements." No confirmatory find of pottery in association with a lithic culture of evident antiquity has yet been reported from south of the Zambesi. On the available information, it is not possible to institute any comparison between this Dhlo-dhlo material and that from Mumbwa.

In East Africa, on the other hand, the association of pottery with geologically-dated lithic cultures of Late Stone Age type is established. From the preliminary description of Leakey (1931), however, it does not appear that any significant parallel can be drawn between any of this East African material and the Mumbwa pottery.

In the present defective state of our knowledge, therefore, the Mumbwa material takes up an isolated position among African ceramics. This, however, in no way lessens the significance of this discovery. From the description just given it will be clear that, had this material been found unassociated, it would have been confidently diagnosed as 'Bantu,' and the handiwork of a Bantu-speaking Negro people. In actual fact, it was found at depth, in association with a well-characterized lithic culture. Moreover, the same horizon yielded fossilized human skeletal remains of predominantly Bush-Boskop character and devoid of recognizable Negro features. Unless, therefore, there had been gross disturbance of the deposits, of which the excavators observed no evidence, though Laidler (1938) gratuitously assumes it, it must be concluded that the pottery is an integral part of the Late Stone Age culture of this site, and that it was made by a people who were physically non-Negro. The portion of the deposit which contained this pottery and these skeletal remains is presumably of consider-

able antiquity, and the whole culture may reasonably be regarded not only as non-Negro in origin but as 'pre-Negro' or 'pre-Bantu,' in the sense in which these terms are current in South African archaeology, *i.e.*, as ante-dating the first expansion of the Bantu-speaking Negro in South Central Africa.

This conclusion is of the highest importance. It has hitherto been customary to regard all South African prehistoric pottery, with the exception of the distinctive ovoid 'Hottentot' or 'Strandlooper' pottery of the Southern and Western coastal belt, and of very crude wares attributed to the Bushmen in the Drakensberg mountain region, as 'Bantu,' *i.e.*, as having been introduced into South Africa by Bantu-speaking people of Negro physical type. The discovery of such pottery has therefore been regarded as presumptive evidence of the presence of a 'Bantu' culture practised by a Negro people. The Mumbwa evidence shows clearly that such an assumption may be completely erroneous.

This implication had already been recognized by the excavators, who deprecated "the loose habit that has developed, with regard to South African archaeology, of dubbing every fragment "of unglazed pottery as Bantu." It is true that the authors allude, in this connexion, to Laidler's (1929) suggestion of a pre-dynastic Egyptian prototype for the 'Hottentot' pottery of South Africa, which that author subsequently retracted in favour of a hypothesis of Bantu inspiration. Their argument, however, is in no way dependent upon the validity of this analogy, and is in no way weakened by Laidler's change of front, even if this is justified.

If then it is to be concluded that the Mumbwa pottery is pre-Negro and non-Bantu, its affinities with wares of known Bantu-Negro origin have to be accounted for. It may be that these affinities are so far general to primitive ceramics that they are almost without value as evidence of relationship. On the other hand, it is to be remembered that the origins of Bantu ceramics are unknown. We have no reason for crediting the Negro with the origination of the potter's art; we do not know in what stage he acquired it or what modifications it underwent at his hands. The existence of non-Negro, and in some instances pre-Negro, schools of ceramic technique in Southern Africa presents the possibility, even probability, that both Negro and non-Negro

pottery derived their art from a single source of inspiration. It is also conceivable that Negro ceramic art incorporated features of that of the pre-Negro indigenes. In other aspects of culture there is as good evidence of diffusion from non-Negro to Negro as there is of the reverse process. Until more is known concerning the origins of Bantu pottery, it is clearly unwise to use ceramic evidence as a basis for ethnological or chronological deductions in South Africa.

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THE PEOPLES OF FURTHER INDIA: NOTES ON THE RESEARCH WORK OF DR. HUGO BERNATZIK. By Major Erik Seidenfaden, Bangkok.

64 In a recent number of *Forschungen und Fortschritte*, No. 10, 1 April, 1938, Dr. H. Bernatzik, of the University of Graz, has written, under 'Vorläufige Ergebnisse meiner "Hinterindien Expedition, 1936-37," a preliminary report on his expedition in Further India during 1936-37, and on this I should like to offer some comments.

Dr. Bernatzik first mentions the prolonged visit made by Mrs. Bernatzik and himself to the Mawken of the Mergui Archipelago, very primitive and much exploited by Malay, Chinese and Burmese slave-hunters and traders. Dr. Bernatzik is of the opinion that the Mawken (or Moken, as he writes their name) do not possess the racial elements of either primitive Mongols or Negroids. He thinks that the basic elements consist of a wavy-haired, small-bodied and very primitive race, which at an early date was mixed with Austronesians.

Dr. Bernatzik may be right. I have not so far visited the Mawken, but would venture the opinion that the Moken are identical with the Selu'ng and Jakun living along the West Coast of the Malay Peninsula, and as such they are Proto-Malays. Could not their wavy hair be ascribed to an early mixture with the Proto-Australoids, who preceded them? I believe so. Dr. Bernatzik mentions the myths connected with their wanderings, according to which they came from the north, following one of Further

India's giant rivers, Irrawady or Salwin. This might point to their earliest home being south-east of Tibet, the region where the cradle of the Malays is now believed to have stood (v. Sir Richard Windstedt—*A History of Malaya*, p. 3).

Dr. Bernatzik has written a paper on the Mawken containing a very interesting and sensible proposal for protecting these poor people against the maltreatment by and demoralizing influence of their present masters, which, it is hoped, will be adopted and carried out by the Government of Burma. Dr. Bernatzik's paper has now been translated into English, and will be published in the *Journal of the Siam Society*.

Dr. Bernatzik next visited the Negritos or Semang of Malaya, and says that the Semang of Siam, due to their long separation from their kinsfolk in British territory, are culturally purer than these; an opinion which I believe is correct.

From the South, Dr. Bernatzik went to the most northern parts of Siam, where, after many difficulties, he finally succeeded in staying for some time with a horde of the shy, almost naked savage people, called *Phi tong lu'ang*, the 'Spirits of the withered leaves.' Dr. Bernatzik speaks of the contradictory reports on these primitive people as published in the *Journal of the Siam Society*. It stands to reason, however, that my paper, written according to information given by Mr. T. Wergeni, a Swedish teak-forester and big-game hunter, who was the very first European to

meet these people, is still in the main correct (v. *J.S.S.*, XX, i, 1926).

Dr. Bernatzik thinks that he can prove that the *Phi tong lu'ang* are primitive Mongols, who are only food-gatherers and not hunters, and as such represent the lowest cultural stage in human evolution. They have only reached the 'bamboo age.' Their language is something apart, and not in family with any known linguistic group. According to photographs published by Dr. Bernatzik in *Berliner Illustrierte Zeitung*, the faces of the *Phi tong lu'ang*, especially of the women, do not, however, show any brutish features, and certainly do not recall any of the reconstructions of the Peking man.

Dr. Bernatzik stresses the importance of the discovery of these primitive people for the solution of the question of who were the real original inhabitants (*Urbewölkerung*) of Further India. He says that over all N.W. Siam among the hill peoples living there, such as the White Karen and, especially, the Lahu (*Mussö*), racial elements belonging to the *Phi tong lu'ang* are recognizable. This is, of course, a very important observation which, if followed up, may lead to interesting ethnological as well as anthropological conclusions. Dr. Bernatzik is writing a monograph on the *Phi tong lu'ang*, whom he calls the *Yumbri*.

Dr. Bernatzik also visited some of the Maeo or Miao settlements, of which there are a great number spread over the hills in the North and North-East Siam. According to Dr. Bernatzik, who has examined the Maeo anthropologically, they are pure Mongols (notwithstanding that many of their women present very 'Aryan' features and are of a great beauty). The Maeo were, if their traditions are to be trusted, originally a nomadic people living in Central Asia, and emigrated to China, where they became farmers and learnt to use the plough. Oppressed by the Chinese, many of them have now settled on the hills in Siam, French Laos and Tongking, where they have given up cattle-breeding and exchanged the plough for the hoe. Dr. Bernatzik says they even have no ponies. The latter information is not quite correct, as I have myself seen many excellent ponies bred by the Maeo, though in other parts of North Siam than those visited by Dr. Bernatzik. This changing of livelihood and implements of the Maeo has convinced Dr. Bernatzik that the grouping of peoples

according to 'Kulturkreisen' is false. Dr. Bernatzik criticizes Father Savina (*Histoire des Miao*) for his tales about certain biblical traditions which he says are found among the Maeo of Tongking, but of which Dr. Bernatzik could not find any traces among the Maeo visited by him. Though Father Savina's racial theories are too fantastic to be taken seriously, still his enormous experience and life-long connexion with the Maeo is such that I prefer to side with him and accept his word that the traditions noted by him are original, and not due to the influence of Christian teachings. Besides, such traditions, in a more or less modified form, are also found among many of the other hill tribes living in Tongking, North Siam, the Shan States and Southern China.

Dr. Bernatzik furthermore visited the Akha and Lahu (*Mussö*) in the Kengtung State and N.N.W. Siam. He arrives at the interesting conclusion that though the Lahu speak a purely Tibeto-Burmese language they are racially of the same stock as the Wā, Lawā and Red Karens. In my review of the late Sir George Scott's *Burma and Beyond* (*J.S.S.*, XXIX, ii) I have already expressed as my opinion that the Red Karens, though speaking a Karen language, are not racially Karens. They may represent an offshoot of the Proto-Australoids, because of their long skulls. Dr. Bernatzik concluded his travels in Further India with a visit to the Moïr Khā peoples of French Indochina and made a special study of the Biet, who, according to the late Henri Maitre (*Les Jungles Moï*), are a clan of the Western Mngong living in the south-western corner of the Moï country and as such nearest to the Khmer. Dr. Bernatzik says that he found here the oldest and most primitive stage of the culture of the Austronesian Moï and furthermore that he found a relationship between these Austronesian Moï and the Wā and their kinsfolk in North Siam and the Shan States. He speaks also of Northern Austronesian Moï tribes.

The labelling of races and people is a very important thing, and it is necessary to make quite clear what is meant by such labelling, and the conclusions to which such labelling leads. Hitherto students of the Moï and Khā have been accustomed to divide them into those with Môn-Khmer affinities and those with Malay or Indonesian affinities, though it was well known that certain elements differed from these two main divisions. What does Dr. Bernatzik exactly

mean by Austronesians? One might perhaps group the Indonesians, Austronesians, and Proto-Malays into one group. As a matter of fact I cannot see why one should not do so. Deniker is thus inclined to identify the Indonesians with the Proto-Malays, which seems quite proper. I do not understand why Dr. Bernatzik compares the Austronesian (Indonesian) Moï and the Wā, instead of comparing the Moï of Môn-Khmer affinities and the Wā, who no doubt are much nearer relatives. Dr. Bernatzik mentions the many interesting types met with among the Southern Moï or Khā, such as the tall, wavy-haired, straight-featured, European-like types; those with eagle-noses resembling Amerindians; a small, very primitive race which reminded Dr. Bernatzik of the Selu'ng (he says *auf negritischer Grundlage*, though the Selu'ng are not mixed with Negroids, according to his own words) and, finally, a coarse Melanesian type resembling the inhabitants of the Solomon Islands.

To those who are acquainted with the excavations so patiently and efficiently carried out in the numerous limestone caves of Tongking and Northern Annam by Mlle. Dr. M. Colani (*v. Recherches sur le Préhistorique Indochinois* in *Bulletin de l'Ecole Française d'Extrême Orient*, XXX, 3 and 4, 1930), the existence of so many widely varied human types among the populations of the extensive mountain plateaux and the great virgin forests of Indo-china are not surprising.

The results of the researches of Mlle. Dr. Colani, as well as of M. Mausui and Dr. Saurin,

were, besides rich cultural finds, also skeletal remains of five different human types:—Papuan, Melanesian, Negrito, Australoid and Indonesian. During a stay on the plateau of Langbian, in 1931, I personally observed several of these types. Among a gang of navvies working on a road I saw a number of smallish, swarthy people with the pronounced Papuan 'Jewish' nose. Other types were represented by the smart, drilled Radé Tirailleurs, who recalled the Malays, and finally tall men and women with rather rough, but regular, features, who in some cases reminded one of the Amerindians, in other cases of primitive Europeans—Cro-Magnon, if one may be allowed to call them so.

Quoting Baron von Heine-Geldern, Dr. Bernatzik asks whether here, in South Annam, was the common home of the Austronesians, or if the Austronesian Moï are here as the result of a mere secondary return-wave.

As I have said in my 'Races of Indochina' (*Journal of the Siam Society*, XXX, i, 1937), I believe, as Dr. Hutton does in the *Census of India*, that the Melanesians are the outcome of a blending of Australoids and Negritoes, and in the Melanesian population in Further India such a blend came from the west. The Melanesians were no doubt afterwards absorbed or driven out of Further India by the oncoming Indonesians and Môn-Khmer tribes. Part of Melanesia may, therefore, have received its population from Further India and the remainder from a wave passing down the Malay Peninsula and over Insulindia to the Pacific islands, including New Guinea.

POTTERY BRAZERS OF MOHENJO-DARO. *Museum, Madras. Illustrated.*

65 In *Mohenjo-daro and the Indus Civilisation*, (Vol. III, pl. lxxviii, fig. 20) Sir John Marshall gives photographs of three pottery vessels with numerous minute irregular perforations, except near the top. These vessels are relatively crude, and though a large number of them were found, most of them were in fragments. Their use was long unknown, till Sir Aurel Stein discovered a similar vessel in Baluchistan with ashes inside, from which Dr. Mackay concludes that they were "intended to be heaters " or braziers " and that the smaller ones among them were perhaps "used to warm the hands " in the same way as two oyster-shells with live

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"coal between were used not long ago in England." (*Indus Civilisation*, p. 152.) The other suggested uses are straining and cooking, which Dr. Mackay considers to be unlikely.

In view of the well-known Dravidian affinity of the Indus culture, the perforated earthenware pot (Fig. 1) used for ritual purposes in Southern India may be of interest in interpreting the perforated pottery of Mohenjo-daro. Perforated vessels used in the Tamil country are known as *āyiram-kannu-pānai* ('pot with one thousand 'eyes'). The specimen illustrated here is sundried, but not baked, and has holes throughout, including the bottom, as in the Mohenjo-daro

braziers. It has, in addition, three triangular openings cut below the neck, and also three



FIG. 1. TAMIL 'POT WITH ONE THOUSAND EYES.'

nāmams (three-pronged Vaishnavite caste-mark) stuck on to the surface after the vessel had been

polished. Devotees go round the temple carrying burning camphor in this vessel, the camphor being placed on a mixture of rice-flour and sugar. The vessel photographed was obtained from the trustee of the Mari-amman temple at Periyapalayam where, for protection from small-pox and other diseases, pilgrims dress themselves with twigs of *margosa* leaves and do *pradakshinam* (circumambulation) round the temple.

Similar vessels of burnt ware, without the *nāmams* and the triangular apertures, are used for carrying lights during the procession in connexion with 'fire walking' ceremonies.

Sherds of perforated pottery have been found by the writer at Manjankaranai, where relics of South Indian culture from the palaeolithic to early iron ages can still be found.

As many other factors than the perforations in the pottery have to be taken into consideration, it is not the writer's intention to suggest that the Mohenjo-daro braziers were used in the same manner as the 'thousand-eyed pots' of the Tamil country, but it is hoped that these 'braziers' will be re-examined in the light of the ethnological information now available.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

Initiation Rites Among the Bantu of Kavirondo (Kenya). *Summary of a Communication by Dr. Günter Wagner, 4th April, 1939.*

66 In spite of various statements to the contrary (e.g., Sir Harry Johnston, the Uganda Protectorate), circumcision and initiation rites are universally practised among the Bantu of Kavirondo.

According to the chronological order of events, the initiation rites consist of five distinct phases: (1) A period of psychological and magical preparation by the candidates, (2) the physical operation, (3) the time of convalescence, (4) the 'bush-school' in the hut of seclusion, and (5) the festive dismissal of the initiates from the hut of seclusion and their ritual admission into the community of adult men. This is formally marked by grouping all initiates of one circumcision year into an age-grade, which then forms part of the tribal age-grade system.

An analysis of the ritual procedure reveals a number of features which must be interpreted as being educational (tests of manliness, means of instilling self-restraint and norms of social conduct into the minds of the initiates). More conspicuous than these educational features is the magico-religious symbolism of the rites. During their stay in the hut of seclusion the initiates lead a double-existence, resembling in their active and passive behaviour, on the one hand, newly-born children and persons who have recently died and, on the

other hand, young mothers and widows. An infant, an initiate, and a recently deceased person are thus ritually identified, and the relation of the former personality of the initiate to his new self is conceived of as being analogous to the relation of a mother to her child and a widow to her dead husband. This parallelism furnishes the clue for a deeper understanding of the significance of the initiation rites, for when viewed in conjunction with other 'rites of transition' initiation appears as a means of severing the child from its maternal affiliations and of ritually binding the new personality of the adolescent to the legal, political, and religious community of the patrilineal clan. Thus, whatever their historical provenance, the initiation rites have been developed among the Bantu Kavirondo into a means of supporting the structure of patrilineal clanship.

Results of the Smithsonian Anthropological and Archæological Explorations in Alaska, 1926-1938. *Summary of a Communication by Aleš Hrdlička, M.D., 25th April, 1939.*

67 From 1926 to 1938 the speaker, under the auspices of the Smithsonian Institution and the U.S. National Museum, made ten expeditions to Alaska and the off-lying islands, for the purposes of surveying the mostly vanishing remnants of the full-blood native populations; of collecting adequate skeletal materials; of exploring such mummy caves

as may still be found in the Aleutian Islands; of exploring the Commander Islands to learn definitely whether or not they have been peopled in pre-Russian times, and thus may have served as another stepping stone in the immigrations of Asiatics to America; and to learn from both the physical and the cultural remains of man in those regions whatever it might still be possible to learn concerning the antiquity and nature of the coming of man from Asia, which itself may safely be regarded as one of the best-founded conclusions of American anthropology.

The explorations extended to the principal rivers, coasts and islands of western Alaska, to the important island of Kodiak, to the principal islands of the Aleutian chain, and finally to the Bering and Copper Islands, close to Kamchatka. Assisted yearly by from one to eight volunteer students, the expedition was able to make extensive excavations, particularly on Kodiak and the Aleutian Islands, which yielded much new material and threw important new lights on both the physical anthropology and the archaeology of the regions.

The total general results of these expeditions may briefly be enumerated as follows:

The survey along the rivers, coasts and islands showed hundreds of sites of older occupation, some of these covering upwards of 10 acres of ground, and with deposits reaching in places (Kodiak, Aleutian Islands) in thickness to over 16 and even 20 feet. The basal layers of these human accumulations rest in places directly on glacial till.

The study of the remaining fullbloods, together with the excavations, showed that these regions, which formerly were supposed to have been occupied by but two strains of people, the Eskimo and the Indian, contain still two types of the Indian, two markedly distinct types of the Eskimo, and the

Aleut people, who differ radically from the Eskimo and, to some extent, also from the Indian. In addition to these there were located two older, extinct, and hitherto unsuspected peoples, one on Kodiak Island, and one in the Aleutians. Both of these bear close resemblances to some of the American Indians.

The Commander Islands, it could definitely be settled, were not occupied by man before the advent of the Russians. It seems now doubtful that Kamchatka itself was peopled long before the Russian period. The evidence now suggests that the coming to the Aleutian Islands may have taken place from and over the Kuriles, a thorough exploration of which looms now as of much importance.

From the archaeological point of view whole new, or partly new, cultures came to light, in northwestern Bering Sea, along the rivers, in Kodiak, and in the Aleutian Islands. One of the latest finds in this connexion was that the culture of the pre-Aleut people, on islands where it was possible to explore this more thoroughly, was characterized among other things by well-wrought stone dishes and pots. All the archaeological remains of which any trace could be found were seen to proceed from the neolithic period, though stone chipping was still common in the early times.

Much of importance, too, was learned about the coming of man from Asia. There was no single large migration, but small and repeated passings over, lasting for several thousands of years; the spread in America was essentially along the coasts, not through the mainland; and the peopling of America was gradually effected by the multiplying progeny of the small groups of migrants from Asia. These migrants, it was further ascertained, brought with them already variety in physical type, in culture, and doubtless also in languages.

PROCEEDINGS OF OTHER SOCIETIES.

Congrès International des Sciences Anthropologiques et Ethnologiques: Comité de Standardisation de la Technique Anthropologique (C.S.T.A.):

I. Committee for 1938-42:

Miss M. L. Tildesley (Gt. Britain), *Chairman*; Prof. H. V. Vallois (France), *Secretary*; Dr. J. Aul (Estonia), Dr. L. Bartucz (Hungary), Dr. A. Batrawi (Egypt), Dr. T. D. Campbell (Australia), Prof. I. Castellanos (Cuba), Prof. Mendes Correa (Portugal), Prof. J. Czekanowski (Poland), Prof. G. Dahlberg (Sweden), Dr. C. B. Davenport (Int. Fed. Eugen. Orgns.), Prof. M. Drennan (S. Africa), Prof. C. Fraipont (Belgium), Prof. M. Gamio (Mexico), Prof. W. P. Gowland (New Zealand), Dr. J. C. B. Grant (Canada), Dr. B. S. Guha (India), Dr. Søren Hansen (Denmark), Prof. K. Hildén (Finland), Prof. L. de Hoyos Sainz (Spain), Prof. Chevet Kansu (Turkey), Prof. K. Kiyono (Japan), Prof. J. P. Kleiweg de Zwaan (Holland), Dr. W. M. Krogman (U.S.A.), Dr. J. Koumaris (Greece), Prof. T. Mollison (Germany), Prof. S. O'Shea (Eire), Prof. F. Outes (Argentina), Prof. J. Primanis (Latvia), Prof. O. Schlaginhaufen (Switzerland),

Prof. S. Sergi (Italy), Dr. B. Škerlj (Yugoslavia), Prof. V. Suk (Czechoslovakia), Dr. K. Wagner (Norway), Prof. J. Weninger (Int. Fed. Eugen. Organisations), Dr. T. L. Woo (China).

II. Minutes of the Conference on the Technique of Physical Anthropology called together by the C.S.T.A. in Copenhagen, July 1938.

The conference took place in the Kgl. Nordisk Oldskriftsselskab of the National Museum, Copenhagen, and held five sittings: July 28 and 29 at 10 a.m. and 2 p.m., July 30 at 10 a.m. The following attended:—Miss M. L. Tildesley (London; C.S.T.A. *Chairman*) in the Chair; Prof. H. V. Vallois (Toulouse; C.S.T.A. *Secretary*), Dr. J. Aul (Tartu), Miss M. Collett (London), Prof. G. Dahlberg (Uppsala), Dr. A. Galloway (Johannesburg), Mr. H. T. Hertzberg (Cambridge, U.S.A.), Dr. M. A. MacConaill (Sheffield), Prof. J. Primanis (Riga), Prof. D. Waterston (St. Andrews), Prof. F. Weidenreich (Peking), Prof. F. Wood-Jones (Manchester).

The following sections of technique were set down for discussion:—1. Cranial capacity (direct measurement); 2. Auricular head-height; 3. Eye-colour;

4. Nose-height, upper and total face-height, on living and cadaver; 5. Cranial points and measurements not dependent on craniostat; 6. Head-measurements (excepting on the ear) other than those under 2 and 4; 7. Teeth; 8. Humerus; 9. Tibia.

Data from tests of technique carried out on series of 50, or more, had been contributed from the following Institutes:—

(a) *Anthropological Institute of the Masaryk University, Brno.* Contributed by the Director, Prof. V. Suk: observations of colouring recorded three times on 95 youths by Dr. Edith Oppenheimer, viz., (i) eye-colour by Saller's scale; (ii) eye-colour by Schultz' scale; (iii) hair-colour by Schultz' scale; (iv) skin-colour by Schultz' scale.

(b) *Anthropological Institute of the University of Vienna.* Contributed by the Director, Prof. J. Weninger: observations of eye-colour of 50 individuals recorded independently by Frl. Giesel and Frl. Trnka, in both daylight and artificial light, according to (i) the Martin scale; (ii) the Martin-Schultz scale. Contributed by Dr. Dora Koenner: (i) measurements of 11 characters on 144 to 196 humeri, twice recorded by herself by Martin's technique; (ii) measurements of hand-length and hand-breadth of 100 adults and 34 children twice recorded by herself by Martin's technique.

(c) *Zoological Institute of the University of Tartu.* Contributed by Dr. Juhan Aul: measurements of 28 head and body characters on 51 recruits, twice recorded by himself by Martin's technique.

(d) *Department of Anatomy of the University of Aberdeen.* Contributed by the Head of the Department, Prof. A. Low: measurements of auricular height of 50 students recorded independently by himself and Dr. G. A. G. Mitchell: (i) with the radiometer; (ii) by Martin's method with the upper section of the anthropometer.

The following reports were presented:—

(a) By Miss M. L. Tildesley: (i) 'How much observational variability can be permitted to the various characters?'; (ii) 'Auricular head-height: a survey with standardized technique as objective'; (iii) 'Measurement of head-length and breadth: the systems of Broca, Topinard, Monaco Agreement, British Association, Martin'.¹

(b) By Dr. Lucia Graf: 'Zur Technik der Ohrhöhenmessung am Lebenden'.

(c) By Dr. B. S. Guha: 'A short note on anthropometrical technique, concerning some measurements of the head'.

(d) By Prof. J. Weninger, and in the name of executive group 3 (Dr. Frets, Mr. Hertzberg, Prof. Weninger): 'Kurzgefasste Richtlinien zur Betrachtung von Farbe und Struktur der menschlichen Iris'.

(e) By Dr. Ashley-Montagu: 'A memorandum on nasal height'.

(f) By Prof. F. Weidenreich, and in the name of executive group 7 (Dr. Hellman, Dr. Hjeltman, Prof. Weidenreich), on 'the description and measurement of the teeth'.

(g) By Prof. H. V. Vallois: 'La détermination de

¹ Published in MAN, 1938, 144 and 103 respectively.

'la platycnémie et de la rétroversion du tibia, avec quelques considérations sur les principales mensurations des os longs'.²

(h) By Dr. Lucia Graf: 'Beitrag zur Revision der Tibia-masse'.

The conference also had before it the paper on 'The Essential Craniological Technique: (i) Definition of Points and Planes' by Drs. Dudley Buxton and G. M. Morant which had been discussed in part at the meeting called by the C.S.T.A. in London, 1934.

With the exception of section 8 (humerus) on which no report had been received, some part or the whole of each section of technique on the Agenda was examined, reference being made where necessary to a series of bones lent by the Anatomical Laboratory of Copenhagen.

In regard to sections 1, 3 and 4, the Conference judged further documentation necessary before it could recommend the adoption of any given techniques, and it confined itself to certain general remarks:—

(i) *Cranial capacity, direct measurement:* The method recommended by Dr. Breiteringer⁴ was explained by Miss Tildesley. After consideration and discussion, the conference decided that it would be necessary to submit the method to a series of further tests, to establish the degree of accuracy to be expected from it in the hands of different observers.

(ii) *Measurement of nose-height, and upper and total face-height, on the living and on the cadaver:* Various points had been proposed as the upper limit of these three measurements. The conference considered that if the bony nasion could be located very exactly, that was the point to be preferred. The determination of this point on the living, however, often presented considerable difficulty, especially in the yellow races. It therefore reserved any decision on this point until after a series of tests in which the height of nasion was measured above the lower border of the upper incisors.

(iii) *Determination of eye-colour:* The careful and detailed report presented by executive-group 3 proposed that a glass-eye scale should be used, but said that this classification alone was not sufficient for reliable anthropological and genetical comparisons, since such glass eyes largely ignored the variety of iridal colour-patterns, and since the general intensity of the colour in blue and grey eyes varied with the degree and kind of illumination. They proposed a classification based on iris-structure and colour combined. As regarded the glass-eye scale to be recommended, one of those in present use might serve, but the choice of this would depend on the analysis of data from tests such as had already been carried out by one of the signatories to the report (see above).

² Published in *Bulletins et Mémoires de la Soc. d'Anthrop. de Paris*, 1938, pp. 97-108.

³ Published in *Journ. Roy. Anthropol. Inst.*, Vol. 63 (1933), pp. 19-47.

⁴ Published in *Anthropologischer Anzeiger*, Vol. 13 (1936), pp. 140-8. Dr. Breiteringer's method was also tested and discussed by Dr. T. D. Stewart in the *American Journ. of Phys. Anthropol.*, Vol. 23 (1937), pp. 111-21.

The conference considered that it could not usefully begin discussion of the proposals presented, since that would require much more time than was available and special experience of the subject on the part of its members. Also the accuracy with which the proposed structure-classifications could be applied must be ascertained by means of tests.

The conference was further of the opinion that some quicker method of eye-classification must also be sought for mass-observations carried out in conditions which permitted only a short time for each individual examined. For such purposes one needed a colour-scale which should classify in only a few categories, and consist not of the type-colours but of the colours limiting the categories. Records made by a series of colour-films of eyes might be of value in setting up such a scale.

For sections 2, 5, 6, 7 and 9, the conference put forward certain definite proposals on technique which were passed on to the Committee (C.S.T.A.) to discuss and, if necessary, modify, at its sittings.

III. Minutes of the Sitzings of the C.S.T.A. at Copenhagen, August 1938.

The Committee met at the Kgl. Nordisk Oldskriftselskab of the National Museum of Copenhagen and held two sittings: Aug. 2 at 7 p.m. and Aug. 6 at 3 p.m. The following members attended:—Miss M. L. Tildesley (London), *Chairman*; Prof. H. V. Vallois (Toulouse), *Secretary*; Dr. J. Aul (Tartu), Dr. H. Bijlmer⁵ (Amsterdam), Prof. G. Dahlberg (Uppsala), Dr. A. Galloway⁵ (Johannesburg), Prof. T. Mollison (Munich), Prof. J. Primanis (Riga), Prof. O. Schlaginhaufen (Zürich), Dr. J. Valšik⁵ (Prague). The following also attended, by invitation, to take part in the discussion of the proposals put forward by the Conference on Technique (above):—Dr. Czortkower (Lwow), Prof. H. J. Fleure (Manchester), Dr. G. P. Frets (Poortugaal, Holland), Dr. H. Gould (New Orleans), Mr. H. T. Hertzberg (Cambridge, U.S.A.), Dr. S. A. Huzzayyin (Cairo), Prof. A. Low (Aberdeen), Dr. M. A. MacConaill (Sheffield), Dr. P. Pedersen (Copenhagen), Dr. T. Quelpud (Oslo), Prof. K. Schreiner (Oslo), Prof. K. Stolyhwo (Krakow), Prof. E. Tamagnini (Coimbra), Prof. A. Van den Broek (Utrecht), Prof. F. Weidenreich (Peiping).

1. The Committee approved the Chairman's report to the Permanent Council of the International Congress of Anthropological and Ethnological Sciences on the work of the C.S.T.A. from May 1937 to July 1938.⁶

2. The publication of the other C.S.T.A. reports was discussed, and it was agreed that all anthropological journals, in any language and country, should have the right to publish them if they so desired. Three journals, the *Anthropologischer Anzeiger*, *L'Anthropologie* and *Man*,

had arranged to publish all these and also all C.S.T.A. notices.

3. Having named those whom it recommended to the Congress for appointment as members and officers of the C.S.T.A. for 1938-42, the Committee decided on certain modifications in procedure: (i) That the working out of technical proposals should be entrusted to individuals instead of to groups; (ii) that while all proposals should be widely tested and examined before being recommended by the Committee, they should be submitted to examination in conference only where this seemed the most satisfactory and feasible method; (iii) that, in general, it would seem preferable to select for discussion, in conferences open to all professional physical anthropologists, characters which might be included in a minimum list intended for mass-observation; (iv) that opinions on proposals concerning more detailed studies should on the other hand be sought from individuals, or in conferences of those specially concerned.

4. The Committee considered a proposal by Professor Dahlberg that two such minimum lists of measurements should be drawn up, one for the living, the other for the skull, and that these measurements should be standardized as soon as possible. The proposal was agreed to, on the understanding that the lists would of course constitute a suggestion only: each observer would naturally be free to vary the characters observed according to the object of his researches. Dr. MacConaill (Sheffield) was invited to draw up, for discussion, a list for the living; Dr. Breiting (Munich), for the skull.

5. The Report of the Conference on Technique was examined by the Committee and by the other anthropologists present. With regard to the detailed proposals on eye-classification put forward by executive-group 3, the Committee decided that these should be submitted to individual anthropologists for examination and testing. Dr. Frets undertook to report, in consultation with Prof. Weninger, on the possibilities of the simplified classification suggested by the Conference, and Prof. Van den Broek undertook to carry out tests of any systems of colour-classification they might propose.

Prof. Weidenreich agreed to report on measurements on the teeth and the results of tests as to their accuracy. The Chairman would propose to the Committee later other names for the work on other sections of technique.

The definite proposals on technique put forward by the Conference were then examined by those present, and, after modification in a few particulars, were adopted, being subsequently submitted to, and approved by, absent members of the Committee. These proposals are published below, and are now submitted to the opinion of anthropologists generally.

IV. Proposals on Anthropological Technique put forward by the C.S.T.A. from its meetings of August 1938.

General Remark.—In its proposals below, the Committee has concerned itself chiefly with points in

⁵ Sitting as deputies for Prof. Kleiweg de Zwaan (Amsterdam), Prof. M. R. Drennan (Cape Town) and Prof. V. Suk (Brno) respectively.

⁶ To be published, with the corresponding report on the work of 1934-7, in the *Compte-rendu* of the Copenhagen Congress.

the techniques under consideration in which practice differs. It has not aimed at giving a complete definition of each of these techniques.

Proposal concerning tables for publication.—The Committee recommends that, in published tables of measurements, the names of the characters measured be given in Latin, in order that the data provided by the tables may be made use of by all, whatever the language used in the text.

Proposals concerning head-measurement.—

1. Head-measurements in general to be made without pressure, but contact to be felt.

2. In records of head-height, data obtained by direct measurement should always be distinguished from those obtained by subtracting from stature the height above ground of the selected auricular terminal. The former to be termed 'auricular height to apex'; the latter 'auricular height to vertex'.

Auricular height to be measured with the head adjusted to the ear-eye plane.

The auricular terminal to be approximately at the level of the upper border of the auditory meatus.

Although the definitions given respectively by the Monaco Conference and R. Martin of the auricular terminal are differently worded, it was found that they were interpreted alike as being 'at the point where the upper free border of tragus meets the helix'. This point therefore is the one to be identified as the tragion.

A study must be made of the relative accuracy of the instruments for measuring auricular height direct; but in no case should they introduce tips or plugs into the auditory meatus.

3. Head-length and head-breadth should be measured with the subject seated; and the observer should determine the transverse and sagittal planes of the head by its shape as viewed in *norma verticalis*.

Maximum breadth to be measured above the crista mastoidea, the observer standing behind the subject.

4. The bizygomatic and bigonial diameters to be measured according to the directions given by the Monaco Conference and R. Martin, which it does not seem possible to make more precise. Great care, however, must be taken to avoid sources of error in carrying them out. The same applies to the minimum frontal diameter, to take which the calipers should travel obliquely up from the temporal fossae.

Proposals concerning skull-measurement.—The basion and prosthion to be regarded not as two geometrical points but as two groups of points, situated in the median plane of their respective areas, each point being the one which gives the maximum length to the character measured⁷. Thus for basio-bregmatic height the point taken as basion would be the lowest on the anterior border of the occipital foramen; for basion-nasion and basion-prosthion diameters it would be the point most distant from nasion or prosthion. Similarly in measuring upper face-height the point taken as prosthion would be the lowest in the inter-incisive region; in measuring

from basion to prosthion it would be the most anterior point.

Attention is drawn to the fact that caliper measurements based on the above definitions would not give the sides and angles of a nasion-basion-prosthion triangle.⁸ In spite of this disadvantage they should be retained, since the definitions of basion and prosthion as single points are all more liable to lead to discrepancies in technique.

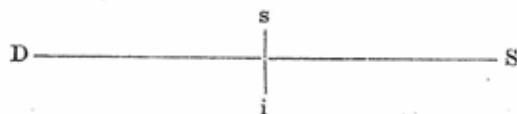
Proposals concerning dental description.—

1. In the text, the different categories of teeth to be denoted by their initials: the capital letters I, C, P, M, to denote permanent teeth, the small letters i, c, p, m, to denote the milk-teeth.

2. The place of each tooth in its category to be indicated by a numeral after the initial. The numeral to be put higher or lower than the letter according to whether an upper or lower tooth is indicated. Put at the same level, it would indicate both upper and lower at the same time. (Thus M¹ would mean upper 1st molar, M₁ lower 1st molar, M1 1st molar upper and lower.) For the canine the numeral would be replaced by an apostrophe.

3. The right side to be denoted by the abbreviation d (= dextrum), the left side by s (= sinistrum).

4. The complete set of teeth in each of the dental arches to be shown diagrammatically as indicated below, the letters s and i indicating upper and lower, D and S right and left.



In each quadrant, the permanent teeth to be indicated by the arabic numerals 1 to 8, the milk by the roman numerals I to V. (Thus the formula $\overline{1\ 2\ III\ IV\ V}\ 6$ would signify the left side of an upper jaw, with a milk canine and two milk molars, two permanent incisors and a permanent first molar; the formula $\overline{2}$ would merely indicate a lower left lateral permanent incisor.)

In these formulae, certain special features to be indicated by the following conventional signs:—

| | | |
|----------------------------|-----|--|
| tooth missing ⁹ | — | (e.g., $\overline{1\ 2\ -\ 4}$) |
| tooth unerupted | () | (e.g., $\overline{1\ 2\ (3)\ 4}$) |
| tooth erupting | ^ | (e.g., $\overline{1\ 2\ \hat{3}\ 4}$) |
| supernumerary tooth | ∨ | (e.g., $\overline{1\ 2\ 3\ \vee\ 4}$) |
| pathological tooth | + | (e.g., $\overline{1\ 2\ 3\ +\ 4}$) |

⁸ On series of sagittal contours, traced and measured for the purpose of constructing a type-contour from their means (as is done, for example, in the school of Pearson), it would be necessary to construction, and no disadvantage to accuracy, to represent basion and prosthion each by a single defined point. The sides and angles of the 'fundamental triangle' could be obtained from the contour.—M. L. Tildesley.

⁹ A point not discussed in Committee was the need to distinguish between pre- and post-mortem loss. A personal suggestion is that "—" should mean only the former, and that "O" should indicate the open alveolus of a tooth lost post-mortem.—M. L. Tildesley.

⁷ Basion-opisthion diameter not included.—M. L. Tildesley.

5. The nomenclature in use among palaeontologists to be adopted for the molar and pre-molar cusps. In the upper jaw, the anterior-external tubercle would be termed *paracone*, the posterior-external *metacone*, the anterior-internal *protocone*, the posterior-internal *hypocone*.

In the lower jaw the external tubercles to be named, in order from front to back (in the medio-distal direction), *protoconid*, *hypoconid*, and *hypoconulid* (= *mesoconid*); the internal tubercles, in the same order, *metaconid* and *endoconid*. When there was a sixth tubercle, it would be called *cuspid sexta*.

6. The surfaces of the teeth to be specified by the following terms: the external (anterior, or buccal) surface by *labialis*, the internal (posterior, or palatal) surface by *lingualis*, the surface facing the next tooth nearer to the median axis by *proximalis*, the opposite surface to the last by *distalis*. The masticatory (occlusal) surface to be called *masticatoria*.

In figures illustrating the last-named surface, the tooth always to be oriented with its labial surface uppermost.

7. Before giving any measurements, it is absolutely necessary to indicate the degree of wear of the tooth measured, for only teeth that are equally worn can be directly compared. A classification of wear will be worked out with a minimum number of categories.

8. The term *length* to be reserved for the proximo-distal diameter, the term *breadth* for the labio-lingual diameter, the term *height* for the corono-radicular diameter (= vertical dimension).

Proposals concerning the measurement of platynemia.

1. Platynemia to be determined by diameters

measured at the level of the lower border of the foramen nutritium.

2. The sagittal diameter to be defined as 'the maximum sagittally from the crista anterior of the tibia'.

3. The transverse diameter to be defined as 'the transverse projective measurement from the crista interossea when the tibia is held by the sliding calipers with the crista anterior touching the stem and equidistant from the two straight arms'.

4. The index obtained from the relative sizes of the above diameters to be called *index enemicus*. In no case should this term be applied to indices based on diameters measured at other levels on the tibia.

NOTICE.—Anthropologists professionally employed in physical anthropological research or teaching are urged to consider carefully the above proposals, and to communicate their acceptance or disagreement to the C.S.T.A. Chairman (Miss M. L. Tildesley, c/o Royal Anthropological Institute, 21 Bedford Square, London, W.C.1) or to the C.S.T.A. Secretary (Prof. H. V. Vallois, École de Médecine, Allées Saint-Michel, Toulouse, Haute Garonne). Those proposals that meet with general acceptance will be formally adopted as standard technique, and an announcement to this effect will be made in this and other journals.

The object of the Committee is to register general agreement only where this will be achieved *in practice*, and thus to serve the common interest of all who wish to make valid comparisons between the data of different observers for the characters in question. The correctness of its interpretation of the general attitude must, however, largely depend on the extent of the information received.

M. L. TILDESLEY : H. V. VALLOIS.

OBITUARY.

Henry Balfour, F.R.S.: 1863—9th February, 1939.

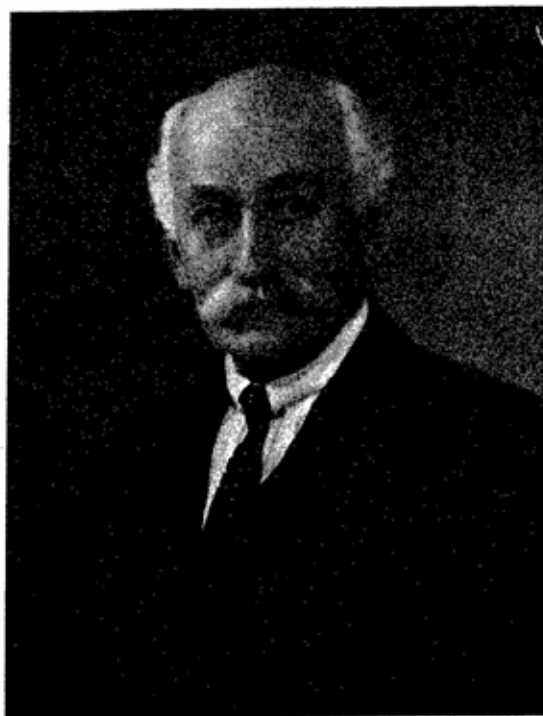
69 Many forms of learning and skill are the poorer for the death of Henry Balfour, best known as the curator of the Pitt-Rivers Museum at Oxford for forty-six years, and one of the foremost exponents of evolutionary technology. Educated at Charterhouse and Trinity College, Oxford, he graduated in biology in 1885, with an established reputation in the University as an oar and a fencer. In the latter accomplishment he excelled till late in life. His keen and sympathetic interest in all forms of life, and especially in birds and orchids, directed his earlier travels; in Norway he studied the habits of whales and whalers; but under the influence of his first teacher Moseley, and of Tylor, who had come to Oxford as Reader in Anthropology in 1883, he devoted himself early to his life work. In 1887 he married Edith, daughter of R. F. Wilkins of Brookhill, Devon, who shared his travels, his work, and his many interests, and survived their golden wedding by a few months. They had one son, Lewis.

Even before graduation Balfour, together with Baldwin Spencer, was helping Tylor and Moseley to put in order the ethnological collections which

had been given to the University by General Pitt-Rivers. Spencer went to his life work in Melbourne in 1888, but Balfour remained in Oxford, and was appointed in 1891 to be curator of the collections which he had already done so much to arrange, and to illustrate by his unusual skill and patience in all manual arts, and his facile draughtsmanship. To understand savage or prehistoric crafts, he was ever insistent that you must practise them, and the Pitt-Rivers Museum has wonderful examples of his handiwork. A man of great personal charm and many friends, he succeeded in enriching the collections with innumerable gifts from correspondents in all parts of the world, and in amplifying the record of the geographical and ethnographical distribution of each type. Most of their labels are in his own fine handwriting, and the position of each specimen in relation to its typological neighbours was also of his choosing. No wonder that, with series growing daily under his hand, he found little time, and not much inclination, for systematic publication. His contribution to learning, indeed, is the Pitt-Rivers Museum, in its present shape and extent, for others to study and describe.

But when Balfour put pen to paper, his writing

was masterly. Best known of his works are *The Evolution of Decorative Art* (1893), the first part of a *Natural History of the Musical Bow* (1899), his address to the anthropological section of the British



HENRY BALFOUR, F.R.S.

Association at Cambridge in 1904 on the work of Pitt-Rivers, and in 1929 on *South Africa's Contribution to Prehistoric Archaeology*; his presidential address at Johannesburg to the Anthropological Institute in 1904, on *The Relationship of Museums to the Study of Anthropology*; and his Huxley Lecture *The Archer's Bow in the Homeric Poems* (1921). The Cambridge address was remodelled as the introduction to the collected edition of Pitt-Rivers' essays, *The Evolution of Culture* (Oxford, 1906); and the Huxley Lecture resumed an early paper on the

Structure and Affinities of the Composite Bow (J.A.I., XIX (1890), 226). It is understood that an inclusive bibliography will form part of the memorial volume now in preparation.

Though hampered in later years by physical infirmity, Balfour had travelled widely; his most fruitful journeys were in Norway, in Assam visiting his friends Hutton and Mills, and in South Africa, where he was one of the first to detect palaeolithic implements in the gravels of the Zambesi, and to correlate them with European finds. He was an active Fellow of the Royal Geographical Society, and President 1936-8; President of the Folklore Society, the Museums Association, the Prehistoric Society of East Africa, and other bodies; and honorary or corresponding Fellow of many foreign societies. He became a member of the Council of the Anthropological Institute in 1891 and was a constant and devoted supporter of its work, and President 1903-4. His Fellowship of the Royal Society (1924) he used modestly to ascribe to the Pitt-Rivers Museum, not to himself.

When the University of Oxford established its Diploma course in Anthropology—the first examination was held in 1908—Balfour undertook the whole charge of Technology, lectured also in Prehistoric Archaeology, and was several times examiner. This academic work brought him into fresh contact with undergraduates, and also with a long succession of probationers in the Colonial Civil Service, and latterly with officers on study-leave. He lectured in the Museum, handling and comparing the specimens, and using them with characteristic skill; a memorable experience, though most effective with the smallest audiences. His personal interest in pupils never flagged, and was repaid by enduring friendships and a stream of accessions, documented as he desired. In 1903 Exeter College had elected him to a Research Fellowship for seven years and re-elected him from 1919 onwards; and in 1935 the University conferred on him the personal title of Professor. He was to the end a staunch upholder of the conception of Anthropology as a co-ordinated discipline in all branches, physical, social, and technological, concurrently; and within his own department he insisted on the mutual interpretation of prehistoric and of modern ethnographical material, contemplating alike 'all time and all existence.' J. L. M.

REVIEWS

GENERAL.

Race: A Study in Modern Superstition. By Jacques Barzun. London: Methuen. 253 pp. Price 10s. 6d.

Struck by the exaggerated importance attached to racial grouping in the modern world and the contradictory theories of the characteristics and capabilities of different races, as well as by confusions in the definition of the term, Mr. Barzun launched an intensive inquiry into the historical development and modern significance of race theories. He shows that most of the current theories of race-antagonism are far older than we often suspect; their roots can be found in the general literary and scientific writings of the whole of

Europe from the eighteenth century onwards and were by no means confined to Germany, which has only carried to their logical conclusion ideas common to many other countries.

The word 'race' has been universally used as a stick with which to beat any enemy. According to the author, "race provides the universal joint which holds together an enemy's ignoble traditions, present 'shameful course, and innate perversity.'" Mr. Barzun classes all allusions to race characteristics as "racial 'thinking,' which is the 'lazy man's method of making 'sweeping and unsubstantiated generalizations about 'groups of people,' and it has been, he says, a fault

as common to the academician as to the man-in-the-street. But to show the fallacies inherent in nearly all popular ideas of race is not to prove the impossibility of any really scientific grouping of men according to certain common, heritable, physical characteristics, as the author assumes. To attribute mental and moral characteristics to racial groups is quite unwarrantable by any sound interpretation of the facts as at present known: neither is it always possible accurately to place any individual in one group. But to deny any scientific reality to race at all, and to dub as 'woolly-mindedness' any scientist's allusion to it, is to carry the valuable indictment of the popular absurdities of race thinking to an extreme, and thereby somewhat to weaken the otherwise good case against the misuse and misunderstanding of the term.

An additional reason for not abandoning the concept 'race' is that, as Mr. Barzun shows, so-called racial prejudice generally only hides a deep-seated group antagonism which is really social, economic, political, or religious. Thus, for instance, if we were to suppose a Nazi really intellectually convinced of the groundlessness of his race ideas, he would find other reasons for the persecution of the Jews. The very truth of this belies the author's hope—in which, he says, the book was published—that any systematic enlightenment on the nature of racial differences and characteristics will help to modify policy in the many prejudice-ridden countries of Europe.

ROSEMARY FIRTH.

Apes, Men, and Morons. By E. A. Hooton. London: Allen and Unwin. viii + 307 pp. Price 10s. 6d.

71 Of all biological sciences, anthropology has the most direct bearing on problems of human society. Yet the average layman often shows a more profound ignorance and a greater misunderstanding of the aims and results of anthropological research than of subjects of less practical importance. To-day, when anthropological jargon is being so widely employed by political upstarts in order to bolster up crude and reactionary creeds, it becomes increasingly necessary to establish anthropological truths in the minds of the general public. The professor of anthropology of Harvard University is particularly fitted as a spokesman for his science, for he cultivates a style of writing which is not only forceful and to the point, but is also rich in irony and humour. In popular expositions, humour undoubtedly finds a valuable place in attracting the interest of the non-specialist, and emphasizing particular points of view.

Professor Hooton has collected in this book a series of essays and lectures dealing with a variety of subjects ranging from questions of human origins and racial biology to the study of modern social problems. These essays may be aptly termed grave and gay, for while some deal with their subject with becoming seriousness, others reach a fairly high pitch of hilarity. The contrast is determined, clearly, by the nature of the audience to which the lecture was originally given. The humorist stands at a disadvantage in that his serious moments are not always recognized at their true value, and in some of Professor Hooton's essays it is not always easy to discern his real views. For example, we find the rather startling expression of opinion that "the dissemination of evolutionary teaching among the lower grades of human intelligence—in short to the public—at large—may be inexpedient." A perusal of other essays leaves us wondering whether this is to be taken as a serious statement, or merely as an expression of the author's sense of humour. Nevertheless, regarded from the right angle, these essays make most attractive reading and contain a very large quantity of sound anthropological sense. They fit together to form a book which is well worth putting before the general public and which should find there a warm welcome.

W. E. LE GROS CLARK.

Sardinian Studies. By Members of the Le Play Society, edited by W. G. Walker. London: (Le Play Society), 1938. 8vo, 60pp., with maps and xii plates. Price 2s. 6d.

72 This is the outcome of one of the study-tours organized by the Le Play Society. The study-party received much help from the Italian Government, and personal guidance and advice from Senator Prof. A. Taramelli and members of the Faculty of the University of Cagliari. These Studies consist of essays on the *Geology of Sardinia*, by Mr. W. W. H. Bennett; on the *Archæology* down to Roman times, by Mr. W. W. G. Walker; and on the *Ecclesiastical Architecture*, by Revd. R. W. Stopford; with appendices on the *Solid Wheeled Cart*, by W. Walker, the *Zinc Mines of Monteponi* by Mr. Bennett and a list of plants collected at various points by Dr. Sledge and Captain Chase. The photographic views were taken by members of the party, and the model of the Nuraghe Nieddu by Prof. Guido Costa. The itinerary pp. 15-18 shows how well the tour was planned, and how industriously it was carried out.

J. L. M.

RELIGION.

A History of Roman Religion. By Franz Altheim. Translated by Harold Mattingley. London: Methuen, 1938. 548 pp. Price 21s. net.

73 This translation constitutes a revised and enlarged edition of the original German. While the views of the author remain unchanged, account has been taken of criticisms, though it has not been possible to incorporate the most recent investigations in connexion with the Italian rock-drawings and sculptures, including the author's own theory of the Val Camonica cult-pictures and their counterparts in the prehistoric art of Eastern Spain and elsewhere.

Unlike Wissowa or Cyril Bailey, Professor Altheim is not concerned to give an account of Roman religion as such, but "to assign to it its place in the historical development of Rome." The culture and the cultus grew up together as a coherent whole, as in so many other regions, so that the function of the one cannot be separated from that of the other. It was not until the Christian era that the antagonism of Church and State

arose and ultimately led to the Augustinian antithesis of the *Civitas Dei* in opposition to the 'earthly city' typified by pagan Rome in the days of its decline. Therefore, the present volume opens with a survey of Ancient Italy and the forces which consolidated it as a unity, geographical, political, ethnological, linguistic and cultural, expressed in a system of concentric circles defined as State, Civilization and Nation. The incursion of tribes on the periphery of the main sphere of Mediterranean culture had a profound effect in Italy, as in the case of the immigrations of the peoples from the north of the Balkans into Greece and the Aegean. But in the West the Indo-Germanic stratum was preceded by a culture of Mediterranean origin which succeeded in maintaining its individuality till far into historical times, and influenced to a considerable extent the Indo-Germanic peoples of Italy.

In Chapter II the Etruscan problem is discussed together with the question of mother-right in Etruria in relation to contacts with Greek civilization, leading up to the Italian bull-god and the position of woman in

Etruria, Campania and Rome. In the next section the cult of the dead among the cremating people, as the earliest substratum of the Palatine city, is very briefly described, and the mingling of these rites with those of the inhumating people on the site of the city of Rome. At a very early period a wave of Etruscan influence flooded Latium, as is shown by the pottery and the names, such as those of the god Volcanus, and of five of the hills included in the union of the Septimontium.

From a series of fragments of inscriptions, the earliest Roman calendar of festivals is analyzed and the origin of the most ancient circle of gods sought in particular settlements. From Etruria and the Oscans of Campania, it is claimed, Rome received her earliest Greek deities, and it was at this time, about 800 B.C., when the Etruscans began to appear, that a general Italian development became manifest. Despite all her contacts with, and borrowing from, other spheres, Rome transformed and reshaped the varying traditions and cultures received into a specific and final form which characterized the genius of the Eternal City, as is evidenced by her interpretation of the kingship and the conception of deity.

This section ends with a discussion of the vexed question of 'Roman Myth'; a subject to which a review would have to be devoted if any useful comments were to be attempted.

The remaining divisions of the book deal with (1) the reshaping of the cult in the Roman Republic in its earliest form, under the influence of Greek ideas and institutions, together with the fall of the ancient Italian culture, the rise of Rome and the intrusion of Hellenism. (2) The religion of the Augustan Age follows, and an estimate is given of the place in the cultus of the poet and the 'Secular Hymn' of Horace. (3) The volume closes with an account of the Empire, the causes of the greatness of Rome, the Age of the Severi, and the ultimate disintegration of one of the most amazing developments in the history of human society. The book contains many very debatable conclusions about which expert opinion is likely to remain divided as in the past, but the material, with 65 pages of references and notes, is of permanent value.

E. O. JAMES.

FOLKLORE.

Traditions and Customs of Cheshire. By Christina Hole. London: Williams and Norgate, 1937. xiii + 214 pp., 8 illustrations. Price 6s.

This is in no way a learned, systematic or scientific book, but a pleasant and readable collection, including some first-hand items, of local antiquities and folklore. The authoress shows, by her uncritical mention of some very ridiculous lucubrations of amateur antiquaries, that she has not the training to write a scholarly treatise; but she writes sympathetically, gives a list of works consulted (though, unfortunately, no detailed references to them or any other authorities) and clearly knows the county and its people. Her nine chapters (*Life's Occasions, Farming, Birds and Beasts and Living Things, Wells and Water, The Spring of the Year, Wakes and Fairs, Dark Winter, Trouble and Disgrace, Ghosts and Boggarts, Admirable Curiosities, Tales and Traditions*) give in their titles a sufficient indication of the book's contents; the last two deal chiefly with historical or quasi-historical material, while the 'trouble and disgrace' which occupies a chapter is that connected with obsolete punishments, such as the stocks.

The folklorist will find a good deal which might equally well occur in any English county, or for that matter almost anywhere in Europe; some details show the

proximity of Wales, such as the corpse-candle (p. 16), and perhaps the use of 'French' for anything strange or foreign (p. 44; cf., Welsh *llygoden Pffrenig*, 'French mouse', i.e., rat). Some again, are interesting as being characteristically local or else uncommon, as the charming of an enemy (p. 13) by winding some of his hair about a toad's leg, the customs (p. 32 ff.) connected with marling, the fact (p. 39 f.) that rooks, as well as bees, should be told of a death, and the occurrence (p. 48) of an agricultural belief which depends on the solar calendar, not on the moon nor on church festivals; shallots ought to be planted on the shortest and pulled on the longest day of the year. Worth noting also are such things as the healing powers of a posthumous child (p. 10), the belief (p. 36) that 'hanged hay', i.e., hay which has been bought and not grown on the owner's land, is not nourishing for cattle, the details of the local form of bundling ('sitting-up', p. 3, a little glossed over, as usual), of souling (p. 110), and of mumming (p. 113). First-foot should be dark and bring symbolic gifts (p. 123) and a binding engagement of any sort can be made by those concerned driving a nail into a tree (p. 14). Some weaknesses in detail are atoned for by the modest and unassuming tone, the key-note being struck in the preface (p. vii).

H. J. ROSE.

CORRESPONDENCE.

Acknowledgement and Apology.

75 Sir,—In my recently published work, *The Church and Primitive Peoples*, London (Society for Promoting Christian Knowledge), 1938, I have made use of an unpublished thesis lent to me by its author, Dr. Max Gluckman. In my Preface (p. xiv), I have expressed my appreciation of the help given me by Dr. Gluckman. But I realize now that, in thanking him for 'much useful information,' I employed a phrase which fails to make clear either that a great deal of this information is derived from an unpublished thesis, or the actual extent of my indebtedness to Dr. Gluckman's work. Some of the passages from his thesis, used by me, also contained references to other anthropologists which, owing to my lack of experience in literary custom, I have omitted to reproduce.

The main passages in my book for which I am indebted to Dr. Gluckman's thesis are the following:

P. 5 to the 14th line of p. 9; pp. 85-87, 28th line; p. 93; pp. 100-1; p. 108, 15th line, to p. 112; 38th line of p. 115 to 26th line of p. 116; 10th line of p. 85 to 15th line of p. 86; 35th line of p. 87 to end of page; 32nd line of page 99 to end of page; 21st line of page 103 to 29th line of page 104; 19th line of page 107 to end of page; pp. 114-118, 6th line, with the exception of the middle paragraph on p. 117; pp. 130-2; pp. 142-151, end of third paragraph; last paragraph on p. 164 to p. 165, 30th line; penultimate paragraph of p. 249 to top of page 250.

I ask for this opportunity to make public this statement and to express my sincere regrets to Dr. Gluckman, in the hope that the above acknowledgement will make it possible for him to use the content of these passages in work which he is himself preparing for publication.

D. W. T. SHROPSHIRE.

Johannesburg.



Fig. 1. MAN OF THE WANGURI CLAN, ARNHEM BAY, ARNHEM LAND,
SMOKING THE 'CRAB-TOOTH PIPE'

MADE FROM THE CLAW OF THE LARGE EDIBLE CRAB, *NEPTUNUS PELAGICUS*, THIS PIPE IS IN COMMON
USE ON THE COAST, AND IS KNOWN AS *NYUKA LIRRA* 'CRAB-TOOTH'.

MAN

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ORIGINAL ARTICLES.

Australia

With Plate F.

Thomson

NOTES ON THE SMOKING-PIPES OF NORTH QUEENSLAND AND THE NORTHERN TERRITORY OF AUSTRALIA.¹ *By Donald F. Thomson, D.Sc. Illustrated.*

76 Smoking-pipes are in use among all the tribes of Cape York Peninsula, as well as throughout Arnhem Land on the opposite shores of the Gulf of Carpentaria. There is evidence for the belief that the use of tobacco has been known in North-Eastern Australia for a considerable time; nevertheless there is nothing to suggest that any attempt to grow tobacco was ever made by any of these people, although it was grown by their neighbours in Torres Straits. But it is of interest

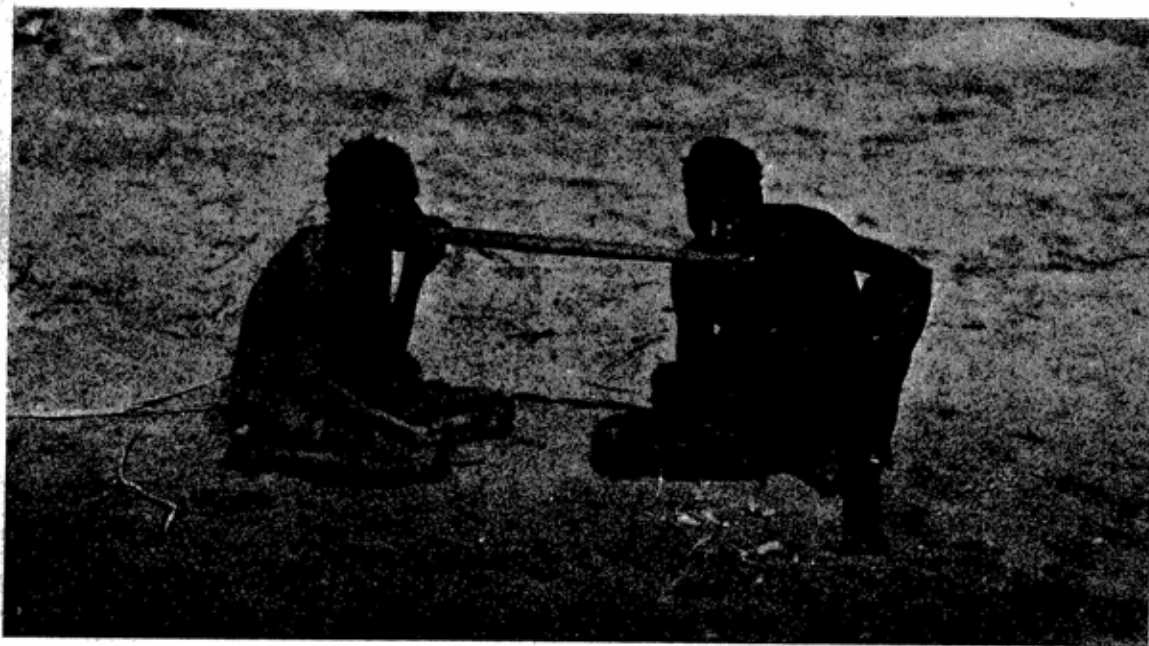


FIG. 2. TYPICAL HOLLOW WOODEN OR BAMBOO SMOKING-PIPE OF CAPE YORK PENINSULA, IN USE ON THE EDWARD RIVER, GULF OF CARPENTARIA.

It is of the type illustrated in fig. 3, having one end open, the other sealed with hard beeswax. The cylinder is perforated by a small hole, into which smoke is blown, or from which it may be inhaled.

¹ The facts presented in this paper were obtained on expeditions to Cape York Peninsula, financed by the University of Melbourne, and in Arnhem Land, during 1935-37 under commission by the Commonwealth Government.

to note that, in at least one tribe of Cape York Peninsula, the natives claim to have used, as a substitute for tobacco, the leaves of a plant which is known to possess certain medicinal properties.

Not only is tobacco smoking a habit firmly established among all these people, but it may also play a very important part on social and ceremonial occasions. In an earlier communication entitled *The Ceremonial Presentation of Fire in North Queensland*² reference was made to the fact that the ceremonial presentation of fire to visitors about to be admitted to a camp, concluded with the passing of a smoking-pipe to them, although I was at that time under the impression that the smoking-pipe had been introduced much more recently than subsequent experience has indicated. During recent field work in the Northern Territory, the ritual aspect of tobacco smoking was noted when the passing of a smoking-pipe became a ceremonial act, establishing and affirming a bond of solidarity. This tends to be specially emphasized in Arnhem Land, where frequently tobacco pipes may bear painted, incised, or carved totemic designs which are sacred, so that in consequence the pipe may be smoked only by fully-initiated members of the totemic group which claims the totem. Although tobacco was never grown by the natives of Cape York Peninsula there is no reason to suppose that it has not been known in this region for a very long time. The material culture, social organization and ceremonial life in this area bears the strongest evidence of a dominant Papuan influence coming through Torres Straits, and there is no reason to suppose that the tobacco pipe, which has since been so widely adopted, was not included in this culture complex. In addition there is abundant evidence of an intermittent intercourse, accompanied by trade, between people from Torres Straits and natives of certain parts of Cape York Peninsula. The Koko Ya'o people of Lloyd Bay, which is the greatest stronghold on the Peninsula of hero cults of Papuan type,³ stated that the people from Torres Straits came frequently in big canoes to Mitirindji (Quoin Island) off the mouth of the Pascoe River, to obtain supplies of stone for their axes, and it is probable that

tobacco was one of the important articles of exchange brought down during these voyages.

It is well known that tobacco is not the only narcotic used by these people, for the natives of North and Central Queensland, although they never made use of the so-called 'Native Tobacco' (*Nicotiana suaveolens*) that grows abundantly in Australia, have actually long been accustomed to collecting and preparing the leaves of another plant (*Duboisia Hopwoodii*) of the same natural order, Solanaceae, and even to transmitting supplies of this plant over long distances. An excellent and detailed account of the preparation and use of *pituri*, with a reference to the economic undercurrent that accompanied it, is given by W. E. Roth.⁴

There is every reason to believe that the use of this powerful stimulant was indigenous to Australia, so that the introduction of tobacco at a later stage, found, in this area at least, a people already prepared for its adoption, since *pituri* was evidently a habit-forming drug. *Pituri* was, however, after special preparation, generally chewed, although Maiden and Roth⁵ both state that it was sometimes used for smoking; this, however, must be a recent innovation, after the introduction of tobacco and apparently only in times of shortage of the latter. Under these circumstances it might have been expected that the introduction among the aborigines, long accustomed to the use of a narcotic of a somewhat similar type, which they employed for *chewing*, would tend to follow the pre-existing pattern of the material long in use. It may therefore be of interest to record the fact that in several years in the field in North Queensland and the Northern Territory I have never seen any aborigine chew tobacco. Moreover, after long contact with seafaring men and with drovers and cattlemen in the more settled areas, the example can scarcely have been lacking. But, as has been stated above, the reverse process has taken place and they have learned, on occasion, to adapt the *pituri* to the smoking-pipe since its introduction.

The craving for tobacco is a very strong force among the natives throughout North-Eastern Australia, and its introduction by white men

² Thomson, Donald F., MAN, 1932, 198.

³ Thomson, Donald F. *The Hero Cult Initiation and Totemism on Cape York* (J.R.A.I., lxiii, 1933); see also Haddon, A. C. *Reports of the Cambridge Anthrop. Expedition, Torres Straits*, Vol. I, 1935, pages 266-273, for discussion of these cults.

⁴ Roth, W. E. *Bulletins of North Queensland Ethnography*, No. 3, 1901, sect. 28.

⁵ Maiden, J. H. *The Useful Native Plants of Australia*, 1889, pp. 168-172; Roth, W. E., l.c.

in the less settled areas where the natives have remained longest in possession of their own culture, has had a very disruptive influence. Under the 'drive' for tobacco the natives will undertake long journeys and endure unbelievable hardships, to obtain a few ounces of trade tobacco. It is probable also that their method of smoking, and the special type of pipe in use in North Queensland both serve to enhance the drug-effect, and induce a craving even stronger than that among more advanced people. A native will sell anything he possesses for a small quantity of tobacco, a fact which has been an active factor in the breaking down of tribal life. The natives of the Lower Archer and Holroyd Rivers on the shores of the Gulf of Carpentaria were for many years in the habit of making journeys inland to the overland telegraph line for tobacco, and to obtain even small quantities they will remain for weeks or months on the edge of a settlement.

By the Ompela and the Koko Ya'o and allied tribes that form the group known as the Kawadji of Eastern Cape York Peninsula, tobacco is called *keni*, properly the name applied to *Derris trifoliata* var. *macrocarpa*, the 'Dynamite Plant,' which forms one of the most important of their fish poisons. *Keni* is also extended to cover any medicine or medicinal product. A second word, *operri*, is used in the tabu-language which is strongly developed among these people, and which is employed in addressing or in speaking 'one side' in the presence of relatives of certain orders.⁶ There is in the Ompela and Koko Ya'o languages no separate verb for 'smoke'; a man says '*ngaiyu ngani bataga?*' 'What shall I bite (smoke)?' I what bite

The word, *keni*, or *mai ken*, is again used by the Wik Monkan tribe of the Lower Archer River district on the Gulf of Carpentaria, as well as by the neighbouring peoples, but here it is not associated with the fish poison, *Derris*, as it is on the Eastern seaboard of the Peninsula. The Wik Monkan claim to have used as a substitute for tobacco in times of shortage, the leaves of a shrub, *Grewia polygama*, which they call *yukk ponk mintjak*. It does not appear to have any narcotic properties, but it is well known as a medicinal plant and I am indebted to

Mr. C. T. White, Government Botanist of Queensland, who determined the specimens for me, for the following paragraph:

'Regarding *Grewia polygama*, the only knowledge I have about this plant is that it is very freely used in North Queensland as a remedy for diarrhoea and dysentery. The leaves are soaked in water overnight, or maybe hot water is poured over them and the liquid allowed to become cold. It forms a somewhat mucilaginous liquid and is said to be very efficacious. I understand that in some parts of the North it is quite an article of trade, not only in North Queensland but in the Northern Territory and right over to the North-West of Western Australia.'

The small drupe of *Grewia polygama*, which is rusty-brown when ripe, and possesses a very sweet taste, though containing a large seed, is eaten by the natives throughout North Australia. But in Arnhem Land as well as in Queensland I found no evidence of the use of the leaves as a substitute for tobacco except in the Archer River district.

I have to thank Sir Arthur Hill, Director of the Royal Botanical Gardens, Kew, for the following note, which is of interest as showing the use of the leaves of another member of the genus *Grewia* in association with tobacco:

'According to C. E. Parkinson (*Forest Flora, Andamans Is.*, 1923, p. 105), the Andamanese use the leaves of *G. microcos*, Linn, for cigar wrappers. It is interesting to learn, therefore, that the natives of Northern Australia formerly used the leaves of *G. polygama* as a substitute for tobacco. We have found no information as to its special properties.

'The drupes of several species of *Grewia*, especially in Eastern Asia, are edible, and are used in curries and chutneys. The roots and leaves of *G. paniculata*, Roab. in Indo-China and Malaya are used medicinally.'

CAPE YORK PENINSULA.

Two main types of smoking pipe are in use on Cape York Peninsula, which show indisputable evidence of external origin. One of these is a Papuan type which has been adopted without any modification except in regard to the material with which it may sometimes be manufactured, and the other is a modification of this type which appears to have been developed on the Peninsula, and to be restricted to this region.

⁶ See Thomson, Donald F. *The Joking Relationship and Organized Obscenity in North Queensland*, Amer. Anthropol., xxxvii, 3, (1935), pp. 460-490.



FIG. 3.

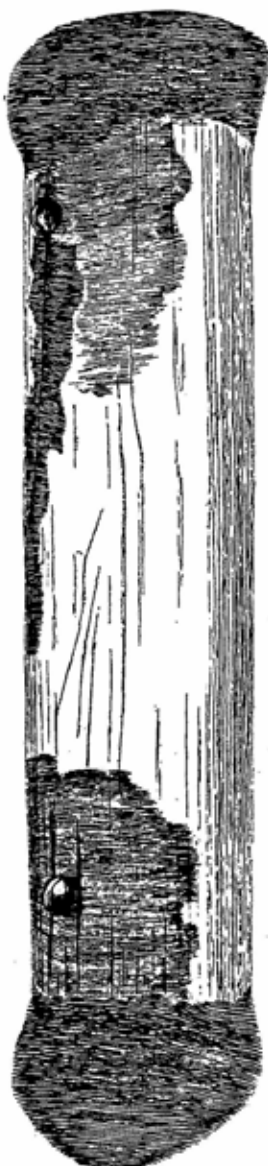


FIG. 4.



FIG. 5.

FIG. 3, 4, 5.—SMOKING PIPES FROM CAPE YORK PENINSULA, NORTH QUEENSLAND :

- 3.—Smoking pipe, *marapi*, made from drift bamboo; Ompela Tribe, East Coast, Cape York Peninsula: proximal end open, bound with split *Flagellaria* cane and beeswax; distal end closed with wax and perforated laterally with small circular hole: L. 770 mm.; D. 50 mm.; aperture 58 mm. from end: same type shown in Fig. 2.
- 4.—Smoking pipe, *tork*, made from *yukk yonk* 'Ironwood' (*Erythrophloeum Labouchei*): closed at both ends with hard beeswax, with two lateral holes used both for insertion of tobacco and for inhalation of smoke: Wik Monkan Tribe, Archer River, Gulf of Carpentaria: L. 292 mm.; D. 57 mm.
- 5.—*Tork manya pukak* (literally, 'pipe small child-for'): child's model or toy pipe, for play only: L. 102 mm.

The more important of these is the hollow wooden pipe made from a branch of a tree or from drift bamboo. These pipes are known to the Ompela and Koko Ya'o Tribes of Eastern Cape York Peninsula as *marapi*⁷, the name applied also to the drift bamboo from which they are most frequently manufactured. This bamboo, which drifts from the east, from New Guinea or the East Indian Archipelago, is of large diameter, and is distinguished from the small local bamboo which is used commonly for the shafts of certain kinds of spears, and is called *pokali*.

On the East coast of Cape York Peninsula I found only one type of wooden or bamboo pipe, the *marapi*, of which a typical example is shown in fig. 5. This consists of a cylinder, generally of bamboo, from which the partitions at the nodes have been removed; it has one end open, the other sealed with hard beeswax, *wakkanta*. A small hole is bored laterally about two inches from the distal (closed) end. This is not in reality a smoking-pipe, but is employed on Eastern Cape York purely as a medium for passing smoke around, and is always used in conjunction with a wooden pipe (consisting of a more or less crude model of a European briar pipe, cut from a solid block of wood), or with a cigarette rolled in paper-bark (*Melaleuca*).

The "smoking" of a *marapi* is a very different matter from the smoking of a European pipe, and is essentially a social or communal under-

⁷ Since this was written, Dr. Haddon has informed me that *morap* is the name for bamboo and also for the bamboo pipe among the Western Islanders of Torres Straits; the Eastern Islanders call bamboo *marep*.

taking. The usual procedure is for a man to fill a pipe or to roll a cigarette, and to inhale deeply, then taking the *marapi* in his hand, he applies his mouth to the open end and expels the smoke into the hollow cylinder. Meanwhile one of those squatting nearest to him applies his mouth to the small hole near the distal end, and inhales the smoke, which he swallows, and finally exhales through his nostrils, fig. 2. The *marapi* is charged again, and passed around to the entire group sitting about, hands being placed over the holes to prevent escape of the smoke. In this way it circulates so that one pipe or one cigarette serves for all, and the *marapi* is employed as a medium for transmitting smoke. The whole process is carried out slowly, with great deliberation, as if to extract the maximum enjoyment from each potent draw, so that the whole thing has almost the appearance of a ritual act. There is, however, no doubt that this method of smoking, the practice of inhaling and swallowing deep draughts from the charged *marapi*, has a powerful narcotic effect, and this has been well described by MacGillivray⁸ as follows:—'On several occasions on Cape York I have seen a native so affected by a single inhalation, as to be rendered nearly senseless, with the perspiration bursting out at every pore, and require a draught of water to restore him; and although myself a smoker, yet on the only occasion when I tried this mode of using tobacco, the sensations of nausea and faintness were produced.'

Women as well as men share in this communal smoking, although a woman would regard it as impolitic to accept in public a pipe from a total stranger. The social aspect of smoking was well indicated to me when an Ompela native who accompanied me on a journey to the Lower Edward River on the Gulf of Carpentaria—a region that was almost a foreign country to him—one day exclaimed to me in an outraged voice: 'this man asked me for tobacco; I look him along eye and say "you countryman" "belong me?"', i.e., 'This man (a stranger) actually asked me for tobacco; I looked at him and said: "are you a countryman—" "what bond is there between us?"' For a man to give a girl a present of tobacco is regarded

as an advance, while if a girl asks a man for tobacco it is taken as an invitation.

The same type of pipe is also used throughout the greater part of Cape York Peninsula, across to the Gulf of Carpentaria. In this region, however, a second type is also in use. This consists of a cylinder of wood or bamboo as in the first, but it is much shorter, it has *both* ends sealed with beeswax, and a small, laterally-placed hole situated about two inches from either end.

Pipes of this type are much used by the Wik Monkan of the Lower Archer River district, where they are known as *tork*. They are manufactured either from drift bamboo *tjak-tjal*, or from hollow wood. The specimen figured (fig. 4) is made from Ironwood (*Erythrophloeum Labouchei*). These pipes are always shorter than the type already described. The specimen shown in the figure is 292 mm. in length and has a diameter of 58 mm. Those made from bamboo consist generally of a single internode or segment, and there is little doubt that the wooden form is also modelled on this pattern. Drift bamboo is much valued, not only for these smoking pipes, but also for the manufacture of the tubular vessels used for the carriage of water. The pipes of the Wik Monkan and neighbouring tribes of the Gulf of Carpentaria were used in the same manner as those of the East Coast, but frequently the tobacco was rolled in a piece of *Melaleuca* bark, *kitja*, and inserted into the lateral hole on the pipe. In this way the stiff paper-bark formed a funnel exactly parallel with the slender tubular wooden funnels described and figured by Jukes.⁹

The mouth is applied to the opening at the other end in the first type, or to the small lateral orifice in the other, and the cylinder charged with smoke. The smoker inhales two or three draughts, places his hand over the holes, and passes the *tork* on.

Especially on the East Coast, and in the more settled regions of the Peninsula, the pipe now in common use is merely a wooden imitation of the European briar-pipe more or less crudely fashioned from a solid block of wood, bored with a red hot wire. This is known in the Ompela, Kandju and neighbouring tribes as *paipo*, an obvious corruption of the English 'pipe.' Among the sand-beach men of the East coast, where the

⁸ MacGillivray, J., *Narrative of the Voyage of H.M.S. Rattlesnake*, (1852), I, p. 126.

⁹ Jukes, J. B., *Narrative of the Surveying Voyage of H.M.S. Fly*, (1847), I, p. 165.

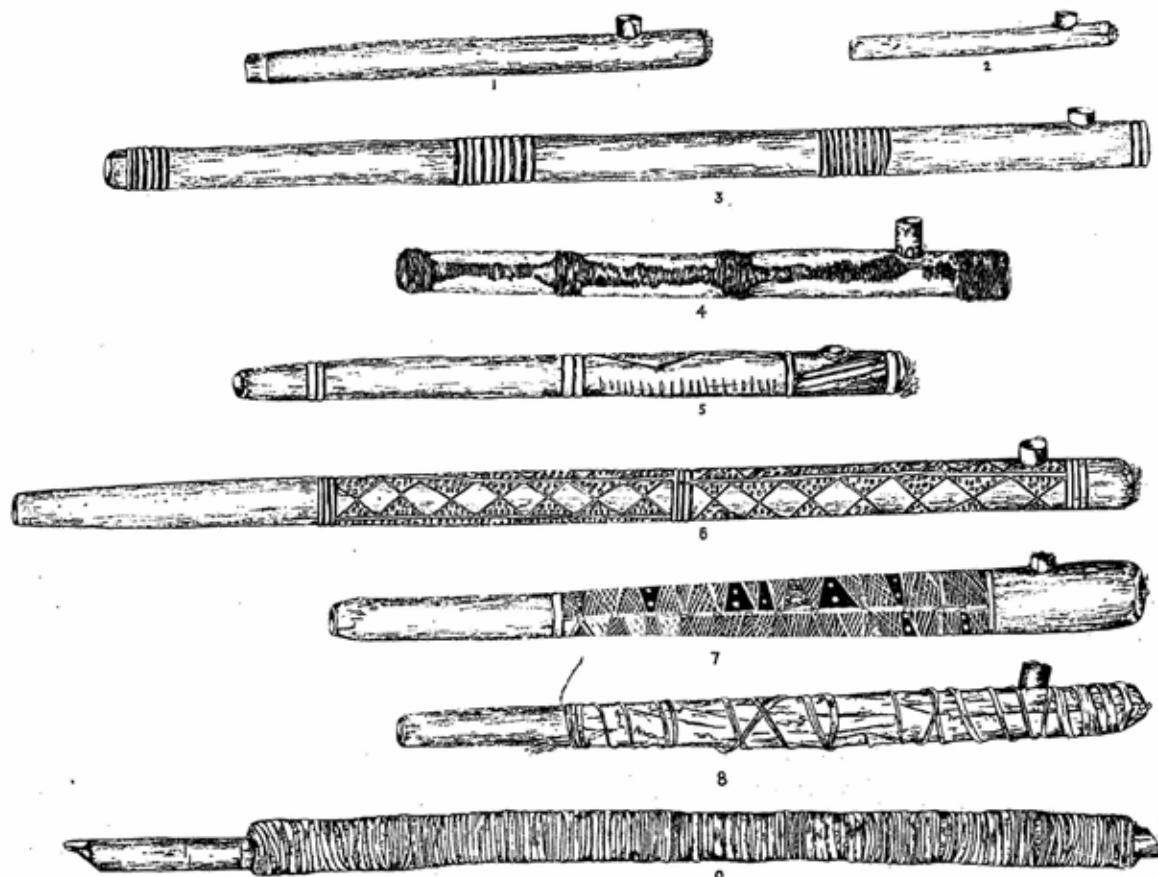


FIG. 6.—SERIES OF SMOKING PIPES FROM EASTERN ARNHEM LAND, illustrating typical examples, with variations in form, in technique of manufacture, and in ornamentation. All are generically *pamutuka*, pipes, but they are sometimes called *lungin*, the name of the wood from which typically pipes of this type are manufactured.

- 1.—Typical smoking pipe of North-eastern Arnhem Land, distal end plugged with 'tea tree' bark, tapered mouthpiece, *ta-poi*, and bowl, *mangotji*, 'eye': made from tinplate: no ornamentation: Burara Tribe, Cape Stewart: L. 250 mm.
- 2.—Model or toy smoking pipe, *pamutuka wakkalpoi*, 'pipe play-for': a child's plaything. Kumait clan, Cape Arnhem district: L. 142 mm.
- 3.—Smoking pipe, of same type as 1, showing ornamentation of non-sacred type in the form of annular rings arranged in four series: Arrawiya clan. Trial Bay, Gulf of Carpentaria: L. 560 mm.
- 4.—Smoking pipe, made by splitting wood longitudinally to facilitate the hollowing of the centre, the two halves joined and secured by lashings, ties, and seams, which are sealed with beeswax: bowl made from tin obtained from a match-box: Blue Mud Bay, Gulf of Carpentaria: L. 330 mm.
- 5.—Smoking pipe of the same type, showing tapering of the wooden cylinder towards the mouthpiece, and beginning of the ornamentation which becomes very elaborate in later specimens. The bowl of scrap tin, packed with 'tea-tree' bark, which is also used in each case to plug the distal end: L. 362 mm.
- 6.—Smoking pipe showing the elaborately carved and incised ornamentation that is frequently seen in this area. It represents the diamond-shaped pattern associated with the *birkurda* ('sugar-bag' bee) totem of Daigur'gur, *barpuro*, and signifies that the pipe is dedicated to this totem, and that it may not be smoked by any but initiated members of the group. These patterns are employed as a deliberate device to restrict the sharing of tobacco. Sacred designs (*mintji*) of this type are always concealed by a wrapping of *Melaleuca* bark, or by binding with calico or other material, which in itself generally denotes that a pipe is tabu (*duyu*): Glyde River district, Central Arnhem Land: L. 600 mm.
- 7.—Smoking pipe of fine craftsmanship, recently dedicated to a totem and newly painted with the sacred *rarrk* (*mintji*, design). The design represents the cloud pattern (*tarrupong*) of Mildjingi clan of the Glyde River as it appears on the *butulo* (bottle) *ranga*. It is of interest to note that the pipe had formerly belonged to a man of the opposite (*Dua*) moiety, and had then been dedicated to a totem (*kula*, human excrement) of that moiety. The design was always masked, when the pipe was in use, with a sheathing of bark (see fig. 8) or a covering of calico wound about the cylinder: L. 440 mm.
- 8.—A smoking pipe of type similar to those shown in figs. 1-7, encased in a sheathing of paper bark (*barrukalla*) and bound with *Pandanus*, to stop leaks. A similar device is used to cover from profane eyes the sacred patterns of the type shown in figs. 6 and 7: L. 400 mm.

marapi is often used, and where tobacco is still relatively difficult to obtain, the European type of pipe is used in conjunction with the bamboo.

The chief interest of the general adoption of this type of pipe lies in the fact that it provides one of the very few examples that I encountered in a period of three years that I spent with these people, in which an element of white man's material culture has been adopted and closely imitated. There are innumerable examples of borrowing but in most instances a material has been adapted and modified sufficiently to fit into the pre-existent pattern. This is well exemplified in the use of iron spear barbs, iron adzes, and iron harpoons, in which the new material has generally merely replaced the old—wood, bone or shell—and has been secured by exactly the same technique as was applied to the material used formerly.

ARNHEM LAND

As in North Queensland, smoking-pipes are also in general use throughout Arnhem Land. Here, however, though there are numerous forms of smoking-pipe, many of which are very distinctive and ingenious, they fall into two separate groups, the first consisting of all the hollow wooden pipes, which show indisputable evidence of external origin, and which undoubtedly came from Indonesia and not from Papua, and a second group containing all the other types, most of which appear to have evolved in this area.

The generic name for all and every pipe is *pamutuka*, but the cylindrical wooden pipes fig. 6 (1-9) are known specifically as *lungin*, properly the name of the wood from which, typically, these pipes are manufactured. Although these *lungin* resemble superficially the hollow wooden pipes of Cape York Peninsula, they are in reality very different, for they are essentially used as smoking-pipes and not merely as reservoirs for passing on smoke from one man to another. While the pipes of Cape York Peninsula are unmistakably of Papuan type and origin, the wooden pipes of Arnhem Land are equally definitely of Indonesian origin and were probably introduced into Arnhem Land, with tobacco, by the early Macassar voyagers, or their predecessors.

The wooden smoking-pipes of Arnhem Land of the type known as *lungin*, of which a representative series is shown in fig. 6 (1-9), normally range from about eight inches in length to about three feet, or a little more. They are more or less straight in the ordinary specimens, but in specially fine examples they tend to be tapered towards the proximal end, and to have a well-defined mouthpiece (*ta-poi*, lit. 'mouth for'). The proximal end is always open, and, as in the Queensland specimens, the distal end is closed, in this case with a plug of tea tree bark, sometimes with the addition of *kallanyin* the black wax of the native 'sugar-bag' bee. A small hole is made laterally an inch or two from the distal end, and into this is inserted a short circular tube made from a piece of scrap tin or tin plate, and the joint rendered air-tight with paper-bark or calico. To-day the metal boxes in which wax matches are packed are much valued for this purpose, and the odds and ends of iron bands and hoops from drift-wood and boxes are eagerly sought after. Occasionally thimbles are used, the tops, however, being removed before they are fitted. The 'bowl' therefore is really a short tube with no bottom; it is called *paitjipang*, or more generally, *mangotji*, 'eye.'

There is much variation in the skill and workmanship expended upon these *lungin* and they are valued accordingly. The simplest are very plain, unadorned, and purely utilitarian. Such objects are referred to more or less contemptuously as '*wakkingnu*,' which really means 'uncouth,' 'unrefined,' in contrast with the finely-decorated specimens upon which much time and skill has been lavished.

Not a little ingenuity is often brought to bear upon the manufacture of these things, in the absence of suitable implements and tools. This is well illustrated in fig. 6 (4) in which the wood had been split longitudinally to enable the hollow lumen to be made, the two halves then joined together, lashed in four places, and sealed securely with beeswax. This is of interest and it may be noted that the same technique has also been employed by the Eskimo for the same purpose.

The technique shown in the specimen in fig. 6 (9)

9.—"*Sterculia*-bark pipe," *balk'balk kalnga pamutuka*. A pipe in process of manufacture from the outer bark of *Sterculia quadrifida*, an ingenious device for overcoming the difficulty of making the hollow lumen of a wooden pipe without tools. The section of a branch

of young wood was hammered to free the cambium from the wood. The whole was then bound with bast-fibre and the central woody cylinder withdrawn: Tjamber' poingo, Elcho Island, Arnhem Land: L. (bark tube only) 480 mm.

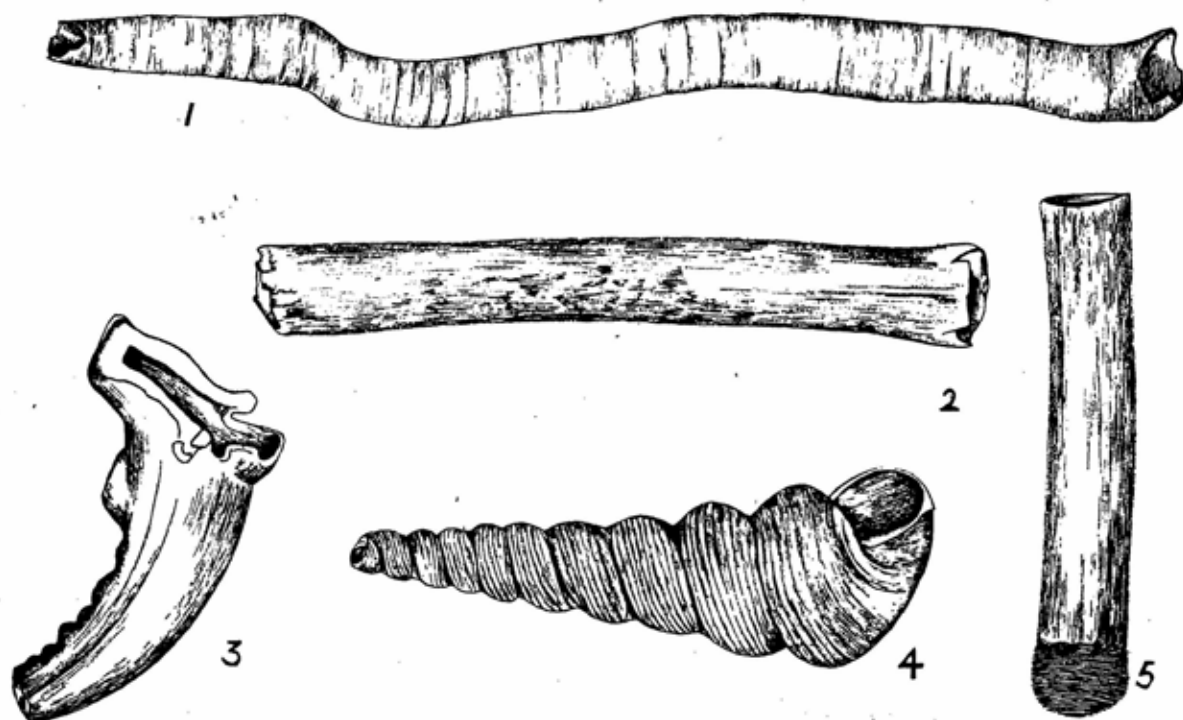


FIG. 7. SMOKING-PIPES FROM NORTH EASTERN ARNHEM LAND: Nos. 1-4 smoking-pipes; No. 5 tobacco-holder.

- 1.—Calcareous tube (laitjin) of *Teredo* used as smoking-pipe: Arnhem Bay district: L. 146 mm., D. 16 mm.
- 2.—Humerus of bird, probably *Kordorkor*. 'Native Companion' (*Megalornis rubicunda*) used as smoking-pipe: the medullary cavity is partly closed with a plug: L. 146 mm.
- 3.—'Crab-tooth,' *Nyuka lirra*; made from chela of an edible crab (*Neptunus pelagicus*, Linn): L. 83 mm.: see also Plate F.
- 4.—Marine mollusc shell, *waianga* (*Turritella terebra* Lamarck) used as smoking-pipe. Wanguri clan, Arnhem Bay: L. 120 mm.
- 5.—Tobacco-holder made from the humerus of a pelican (*P. conspicillatus*): the medullary cavity is closed at one end with 'tea-tree' bark and sealed with wax: L. 106 mm., D. 16 mm.

is even more ingenious, and effectively overcomes the difficulty of making a slender tube in the absence of any other tools than a quartzite spear-head, used as a knife, and a stone to serve as a pounder. A young branch of *Sterculia quadrifida* of suitable diameter, in which the sap was free, was stripped of its bark except for the length of the tube required. The bark was then hammered with a pounding stone to free the cambium from the wood. It was then carefully bound with bast fibre, allowed to harden and the central woody cylinder withdrawn, leaving a tube which would serve very well as a pipe.

Not infrequently the decoration on these pipes is not carried out until some time after the pipe is made, when it has been in use for some time. The simplest type, of which examples are seen in fig. 6 (3 and 5) are non-sacred, but it is the practice in Arnhem Land for a man to dedicate

fine or valued objects of material culture to the totems of his clan, which does render them sacred, so that they are then said to be *yarkomirri*—'with names.' Thenceforth they may be referred to by the totemic name. The conventionalized *mintji* or patterns which belong exclusively to the totem, and to the clan that claims it, may now be painted or incised upon the object. The practice is employed frequently with spears, but chiefly with the greatly valued iron-headed spears, *kaiyit*, rarely with wooden spears; with canoes and canoe-paddles, but only with wooden dug-out canoes, *lippa'lippa*, and their paddles, and not with the indigenous bark-canoes or the paddles of thea; and again with smoking-pipes of the type called *lungin*, i.e., with objects borrowed from the Macassar voyagers.

This is a matter of no small importance in the study of culture-contact in this region, for it

reveals the psychological attitude adopted by the natives of Arnhem Land towards the incoming culture, and the association of the adopted elements with *prestige*. It is suggested that with such an attitude towards the 'invading' or 'borrowed' elements a high degree of receptiveness towards the incoming culture exists, not only to objects of material culture, but also in social matters, and that the borrowed elements, whether material or social, acquire a prestige and a formal approval that finds expression in this ceremonial dedication to the sacred *ranga*, the centre of the sacred and ceremonial life of the group.

Following upon this dedication of the smoking-pipe, it becomes *duyu*, 'tabu,' and may not be smoked by any but men fully initiated to the totem in question;—that is, by men who have been, for the appropriate number of times, through the full series of ceremonies comprising the *ngarra* associated with this *mardai'in*, at which its ancestral history has been revealed and explained to them, and at the termination of which they have been painted with the *mintji* appropriate to this totem.

Sometimes these tabus may remain in force for the entire life of the pipe, but at others, after a certain interval, the tabu may be removed at a special ceremony, at the conclusion of which the pipe or other object is smeared all over with red ochre, *miko*, to mark the liberation from the tabu, and it is now 'free.' The pipe shown in fig. 6 (7) is of unusual interest, for it had been twice dedicated to totems in this way, and had even belonged at different stages, to totems of different moieties. When I first saw it, it was a pipe of Dua moiety, bearing the name of *kula ranga* (human excrement totem), but subsequently it passed to a member of Mildjingi, a clan of Yiritja moiety. It was then named after *ranga butulo* (bottle) and bore *mintji* (called *rarrk* in the Mildjingi language) representing *tarrupong* (clouds) which is characteristic of this group and which is painted upon all its totems.

Once these designs have been made, whether by painting, as in the greater part of the pattern on the specimen in fig. 6 (7) or by carving or incision of the design, as in the 'sugar bag' pipe shown in fig. 6 (6) they must not be exposed to the eyes of the uninitiated, but are kept sheathed with a covering of paper-bark, as in fig. 6 (8) or bound with a strip of calico to cover the sacred *mintji*. This covering is retained, even when the pipe is

actually in use. The effect of this use of sacred *mintji* is further to strengthen the bond that exists between all those who share in a social activity, and to raise the smoking of a totemic pipe almost to the level of a sacred rite. This reaches its extreme development when such a pipe is smoked actually within the *warrau*, literally the 'shade,' the shelter or house of boughs that forms the repository of the *ranga* during a *ngarra* ceremony. For, not only are all those present at such a time bound by the bond either of common possession of the totem, or of full initiation to it, but they are all under implicit agreement never to fight or to quarrel, but to preserve a state of domestic peace, during the progress of a totemic ceremony. It will be seen therefore, that the association of smoking in this area with social matters and with prestige, is a factor of some importance, and that there is a great deal of difference between the smoking of an ordinary *wakkingnu* (non-sacred or utilitarian) pipe and a pipe that is *yarkomirri*. It will be clear, of course, that no woman is ever at any time permitted to smoke such a pipe, although here, just as on Cape York Peninsula, the women normally share a pipe with the men on equal terms.

An interesting aspect of this question is the use to which it may be put with the deliberate object of restricting the use of tobacco, and there is no doubt that it is a ruse frequently employed as a means of hoarding or conserving tobacco without giving the legitimate ground for ill-feeling or the risk of openly incurring a charge of meanness that must otherwise result. The responsibility for failure to 'share out' becomes transferred to the group who may partake, and it is easier to accuse an individual than a group, bound together by a common bond of this sort.

In addition to the *lungin*, which, as has been stated, shows indisputable evidence of its Indonesian origin, a number of other pipes are also in more or less general use. None of these has a very long life; all are regarded rather as temporary or makeshift; they are never greatly valued, and in my experience never *yarkomirri*; they may be smoked by all, unless the tobacco itself is tabu.

A representative series of these pipes from Eastern Arnhem Land is figured in fig. 7. Of these by far the most common is a crab-tooth pipe, *nyuka lirra pamutuka*, fig. 7 (3), made from

the chelæ of the large edible crab, *Neptunus pelagicus*, Linn. These pipes were used in large numbers about Arnhem Bay, at Elcho Island, in the Crocodile Islands, and in the neighbourhood of Cape Stewart. The tip of the claw is broken off to form a tube and this end placed in the mouth (Plate F, fig. 1).

Smoking-pipes are also made from the bones of various birds, especially those of Native Companion, the Jabiru, and the Pelican. These bones are especially suitable for this purpose on account of their lightness in comparison with the bones of mammals, and of the large medullary cavity. The medullary cavity is partially blocked near the distal end, generally with a piece of wood, so that the effect is to make a chamber for the receipt of the tobacco.

No less interesting and ingenious are the calcareous skeletal tubes called *ngarraka* ('bones'), of *Teredo* left when the wood has decayed. fig. 7 (1). Two or three species of marine univalve mollusc shells are also used, chief of which is the shell *Turritella terebra*, Lamarck, figured in fig. 7 (4). This, known as *waiyanga*, is converted into a pipe by the removal of the tip of the shell. My informants remarked that these shells made a strong pipe, not easily broken, like *Teredo* tubes.

Tubular receptacles for the carrying and storage of tobacco are also made from bird bones *ngarraka warrakan*, of which a typical example is illustrated in figure 7 (5). The medullary cavity is closed at the distal end with a plug of 'tea-tree' bark and the proximal end may also be plugged loosely with a wad of the same material. The receptacles for carrying tobacco are frequently carried tied with the bundle comprised of firesticks, together with the bones of certain birds and animals which are carried for some time, and known as *kalngboi*. Such bundles, which have a ritual association, are neatly tied, and are suspended by a string and carried slung across the shoulder. At other times the tobacco-holder may be inserted under the armlet of split cane, *ngaimbak*, worn on the arm, while tobacco may also be carried temporarily inserted behind the ear.

The name for tobacco throughout the greater part of Eastern Arnhem Land is *ngaralli*, but the word *tambakko*, said to have been learned from the Macassar voyagers, is also used. There can be no doubt that tobacco was first introduced

into this area from Indonesia by the early voyagers, independently of the introduction of tobacco into North Queensland, but it is not possible now to say whether the introduction was by the Macassar voyagers, who visited this coast for trepang-fishing and for pearls, or by still earlier visitors. In spite of the fact that they have known tobacco for a considerable time, the natives of Arnhem Land have never attempted to grow it for themselves, nor is there any evidence that the use of *pituri* (*Duboisia Hopwoodi*) was known to them. It appears, therefore, that although they are very strongly addicted to tobacco, they depended for their supplies entirely upon the Malay visitors from the northward who came to the coast of Arnhem Land with the North-West monsoon and returned home with the South-East, bringing with them large supplies of coarse tobacco in twist form.

In addition to the tobacco smoked in a *mardai'* *inboi lungin*, there are a number of other ways in which tobacco may become tabu; sometimes tabu to women and uninitiated men, at others to certain groups which may include men as well as women.

All tobacco which is received in connexion with a *mardai'in* (*ranga*), or *ngarra* ceremony, a totemic ceremony of the *mardai'in* series, is *duyu*, 'tabu,' to all but the actual members of the totemic group who are fully initiated. This applies to gifts of tobacco made in connexion with any *mardai'in* object. Any man who takes part in a *ngarra* incurs an obligation to make large presentations of food or of tobacco and *gerri*, goods, possessions in reciprocation. This is always *mardai'inboi* (from *mardai'in*) and is held to be *duyupoi* (from *duyu*).

Similarly when a young man commences to hunt and begins to acquire prowess in killing game that is regarded as difficult to approach, particularly Emu, Jabiru, Native Companion and Bustard, which has high social and prestige value, he or his father collects the long bones until there is a large accumulation. A ceremony is then held in connexion with these. No woman, and only relatives of certain orders who have grey hair and beards, may eat this *kalngboi* food, and during the period in which these bones are carried, fire made from the firesticks, and also the tobacco that the young man may carry with them, are *duyu*, and are referred to as *kalngboi*.

Another type of *duyu* which may restrict the use of tobacco to members of circumscribed groups, is that arising from mourning practices, of which *kong wukundi* (tabu hands) or *marra morkoimirri* provide examples. The first constitute all those who are in a state of tabu so that they are temporarily excluded from the social life of the group. Generally they eat apart, and the refuse from this eating, such as shells, fish bones, as well as blood and other discharge from wounds, are deposited in this place apart, called *mangotji wukundi*, literally 'eye tabu,' hence 'tabu hole' (*mangotji*) or 'tabu place.' This group also includes those under tabu of a special type, who have recently handled a dead body (*kong wukundi*). It covers, in fact, all those who are excluded from the normal life of the society and who require to undergo a special ceremony of purification before formal readmission.

Marra morkoimirri is the name applied to a

group of related people—an extension of the family—who have recently suffered a loss by death of one of their members. Tobacco used by the former group is *wukundi*, tabu in a special sense. Again the use of this tobacco by any 'outsiders' would be specially resented by the latter group in much the same kind of way in which we should resent an intrusion by outsiders in a family bereavement.

It will be seen therefore that the use of tobacco among these people is now intimately bound up with social and ceremonial life and must be studied in relation to the social background of the society.

Acknowledgements.—I wish to record my thanks to Dr. A. C. Haddon, F.R.S., under whose *mana* this work was carried out, for his generous help and criticism. And to my wife who made all the drawings, and who has helped me at all times, I owe my special gratitude.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

Prehistoric Cultures and Peoples in the British Isles:

77 *Summary of a Communication by C. F. C. Hawkes, M.A., F.S.A. 23 May, 1939.*

Since British Prehistoric Archaeology last received public attention as a single whole, at the time of the International Prehistoric Congress in London in 1932, considerable advances have been made in almost all parts of the study of the subject, which both modify and clarify the picture then presented, and in particular offer a number of points which may be of interest to non-prehistorian anthropologists. In any case, there can be few archaeological enquiries into prehistoric times to which anthropological considerations are not germane. This communication is therefore less a formal paper than a series of comments, based so far as possible on new discoveries and ideas of the last seven years, on what the prehistorian can see of the various cultures in the sequence of early periods in Britain, and on some questions concerning the peoples responsible for them.

Palaeolithic times are only briefly considered, but emphasis is laid on the obscurity which still surrounds the British Upper Palaeolithic, the Continental relationships of which must now be viewed as part of a more complicated pattern than was at one time visible. This in its turn will affect our view of the Mesolithic, the populations bequeathed by which to later prehistoric times are now realized to form an ethnic stratum of great importance. In dealing with the Neolithic and Early Bronze Age, the extent to which the various new cultures overlapped in time, and the effect they thus often had upon one another, deserves particular atten-

tion; at least seven or eight cultures are now recognizable, and are referable to permutations and combinations of at least half as many ethnic elements, while during the thousand years 2500-1500 B.C. these came gradually into a more or less firm pattern of combination with each other, which characterizes the Middle Bronze Age. This process is simply the British version of what happened in these centuries over a great part of Europe in general. The ensuing phase of the story opens with the Late Bronze Age around 1000 B.C., and presents the familiar phenomenon of successive immigrations from the Continent, all usually considered Celtic, which ended only on the eve of the Roman conquest. The familiar dictum that these imposed new cultures in the Lowland Zone, which in the Highland Zone were only absorbed in modified form, may be shown to require a good deal of elasticity in application, and the task of disentangling ethnic from economic causes in considering the distributions of archaeological material is in the Late Bronze Age one of particular delicacy. The whole culture-sequence of the 1st millennium B.C. is marked by the spread of a system of rural economy, attested not only by the plough-agriculture of the 'Celtic fields' now so well known from air-photography, but by the extensive use of ditch-and-bank boundary-strips in connexion with the culture's pastoral side. The extent to which this development of settled life of the land was liable to interruption by invasion and warfare is a question calling for comparison of archaeological evidence between farm village sites and the familiar hill-forts or 'British Camps' of the British Iron Age, and a

provisional account of the position in this regard shows that a fairly definite answer may be considered probably within reach. Finally, the archaeological evidence for social structure from

Neolithic times onwards through the Bronze and Iron Ages may be claimed to be accumulating a definite contribution to the anthropology of Early Europe.

OBITUARY.

Harold Coote Lake: 10 August, 1878—22 April, 1939.

By the untimely death of Mr. Harold Coote Lake the Royal Anthropological Institute has lost 78 its Honorary Treasurer, and kindred societies have been deprived of the devoted services of an indefatigable worker. Born in 1878, Mr. Coote Lake was educated at Highgate School and afterwards lived for some years in France and Germany. During the Great War he acted as interpreter in prison camps, and then went to Vienna with the Friends' Relief Mission. In recognition of the conspicuous success of his labours in connexion with the reconstruction of Austrian agriculture he was awarded the Order of San Salvador, the sole Order left in the bestowal of the city of Vienna after the fall of the Monarchy.

On his return to England, in addition to many cultural, social and horticultural activities and interests, he threw himself into the work of the Folk-Lore Society with amazing zeal and energy. In 1929 he was elected Hon. Treasurer and two years later, on becoming Hon. Secretary, he made this his principal preoccupation. From the first he displayed genuine organizing ability coupled with judgment and discretion. He was, in fact, the 'perfect secretary,' and he gave also unstinted service to the Editor of the Journal throughout the rest of his life. At the First Session of the International Congress of Anthropological and Ethnological Sciences, held in London in 1934, he acted as Secretary of the Religions Section, and the following year, on becoming Treasurer of the Institute, he divided his time chiefly between the R.A.I. and the Folk-Lore Society. In this dual capacity he attended further International Congresses at Oslo, Copenhagen, Paris and Edinburgh, while at the annual meetings of the British Association he was always to be found in Section H, ever ready to be of use in any capacity in which efficient service could be rendered.

While such activities as these were his proper *metier*, he had a refined and scholarly mind and outlook with a profound appreciation of Shakespeare, the Scriptures, and the English poets. Moreover, the numerous reviews and notices (usually unsigned with characteristic modesty) he contributed to scientific journals revealed a wide knowledge of anthropological literature and method. He would not have claimed to be an expert in any particular department of research, but he was as indefatigable a reader as he was a worker, and there were surprisingly few archaeological sites in Greek lands which he had not visited. To have known Coote Lake intimately will remain one of the cherished memories of all his friends and colleagues.

E. O. JAMES.

Edward Sapir: 1884—4 February, 1939.

79 On 4 February, Edward Sapir's notable contributions to linguistics and anthropology came to an abrupt end; yet, while his personal leadership is lost, his influence will long persist.

His contributions to linguistic science are impressive. Skilled in the techniques of Indo-European and Semitic studies, he produced fundamental grammatical analyses of a variety of non-literary languages: Uto-Aztecan, Hokan, Nootka, and Athapaskan. His intuitive grasp of essentials drove swiftly through the mazes of comparative work: Athapaskan relations with Tlingit and Sinitic, Wiyot and Yurok with Algonkin, the Hokan group, Uto-Aztecan, Tibetan influences on Tocharian, etc. Much of the definite proof remains for the heirs of his copious notes, but he had sketched a noteworthy series of stock consolidations. His emphasis, however, was not so much on the explicit historical connexions as on a thesis of extended parallelism in linguistic change ('drift').

But his more significant contribution lay in the novel views and spirit which infused his work. Seeing confusion and inadequacy in the conventional cataloguing of languages as inflective, agglutinative, etc., he proposed in *Language* (New York, 1921) a more fundamental characterization of basic psychological concepts as distinguished from mechanisms for their expression. The shift here is to language as thought, but with full recognition that the observed data are the formal devices of language.

This interest in language as symbolic behaviour was symptomatic of his interest in the whole range of cultural expression. Although he wrote relatively little of this, lecture and conversation explored the interrelation of individual life and cultural framework. The title of his seminar, *The Impact of Culture on Personality*, indicates one approach, to which he brought considerable psychiatric insight. For years he projected a sustained presentation of his views in *The Psychology of Culture*, a book which now, unfortunately, we will never have.

His few published ethnographic papers were primarily offshoots of his linguistic work, from which they derived some uncommon insights. They show an extraordinary sensitivity to the nuances of culture and are phrased with an enviable succinctness and clarity. In addition to published contributions to Takelma, Wishram, Sarcee, and other ethnographies, there remains at his death a magnificent collection of field data on Nootka, Hupa, and Yana cultures.

His record may be briefed as follows: Born in Lauenburg, Pomerania, 26 January, 1884, he was brought to the United States as a child. He received a Ph.D. in anthropology and linguistics at Columbia

University, 1909; honorary Sc.D., 1929. After an apprenticeship of research and teaching, he was Chief of the Division of Anthropology, Geological Survey of Canada, 1910-25. He held professorships embracing both fields in the University of Chicago, 1925-31, and Yale University, 1931-39. Honours came to him from scientific academies of several

countries. He succumbed to a heart ailment at New Haven, Connecticut, 4 February, 1939.

In person he was sensitive and kindly, quick of perception, intuitive and suggestive, with an extraordinary verbal facility—a poet by instinct, a scientist in thought. LESLIE SPIER.
New Haven, Connecticut.

REVIEWS.

AFRICA.

80 *An African Survey: A Study of Problems Arising in Africa South of the Sahara.* By Lord Hailey, G.C.S.I., G.C.I.E. Issued by the Committee of the African Research Survey under the auspices of the Royal Institute of International Affairs. xxviii+1837 pp., 17 tables, 6 maps. Oxford University Press, 1938. Price 21s.

Lord Hailey's monumental *Survey* has already become an historical document of world-wide significance. It would be presumptuous to pretend to comment on it adequately in a brief review. It is encyclopaedic in its scope. Everything pertaining to Africa, in its physical not less than in its social existence, is dealt with in these pages. A glance through the index, which numbers 170 pages of minute analysis, will convince any reader that no relevant topic has been overlooked.

Despite the voluminous and solid detail the theme of the *Survey* stands out clearly. It is a scrutiny of the effects and tendencies of the impact of European civilization on Africa. The general method is to set down, for each topic, the factual information available for each politically distinct territory south of the Sahara, and then to sum up and elucidate the trends of policy and development revealed by the comparison. One is impressed by the judicious detachment—erring, one cannot help feeling, at times on the side of over-caution—that permeates the book. The student of African affairs will be particularly stimulated by the frequent analogies and contrasts drawn with other parts of the world, notably with India. Africa is, as Lord Hailey points out, a vast living laboratory both of biological and of social experiments. It is valuable to be reminded, also, that similar problems have been encountered and sometimes solved in other lands.

The book is oriented primarily towards the problems of the administrator in Africa. The policies, achievements, enactments, and future tasks of Colonial governments loom largest both in the presentation of the factual material and in its evaluation. Not that the complementary task of describing and analysing the response of African communities to the forces of European government, economic exploitation and cultural invasion is neglected. But, as Lord Hailey constantly reiterates, our scientific and sociological knowledge of Africa is extremely inadequate. Apart from the Union of South Africa, very few Colonial governments have accurate population statistics at their disposal; yet such data would seem to be fundamental for any programme of social betterment. Again and again the reader will be struck by the paucity of accurate sociological information available to Lord Hailey. By contrast, there is a huge quantity of printed matter available for his discussions of the policies, powers and legal enactments of Colonial governments. Chapter XII, for instance, is a masterly exposition of the land problem in Africa—but viewed predominantly from the angle of government. The juridical and legal rights of Colonial governments in the land are dealt with exhaustively; native systems of

land law receive only cursory examination, by comparison. For, as Lord Hailey emphasizes, the economic and social consequences of the land policies of Colonial governments still require investigation. The same state of affairs is reflected in the chapter on Law and Justice. Lord Hailey poses the question: Can African legal conceptions and procedures be reconciled with ours? He concludes that "a special study of matters of principle and practice involved" is needed to resolve this and allied problems.

To many readers the outstanding chapters will be those concerned with native administration and taxation. They form, in effect, a comparative analysis of the Colonial policies of the various European powers possessing African dependencies. The analysis concludes with an evaluation of the respective merits of the French policy of direct rule and the British policy of indirect rule. Both, Lord Hailey suggests, are rooted in the political philosophies of the governing countries and have been determined in part by the historical conditions of their Colonial expansion. Neither policy is rigid and each has elements usually regarded as typical of the other. The test will come in the future. Will native administrations under indirect rule be able to cope with the demands for higher standards in the social services which must inevitably arise in the future? Will they be able to afford scope for the ever-increasing numbers of educated Africans?

The anthropologist whose special field is Africa will find invaluable "background" information on such matters as administration, the place of Africa in the world economy, transport and communications, etc., in this *Survey*. He will be least satisfied with the account (Chapter II) of the anthropology and ethnology of Africa and the discussion of the scope and possibilities of anthropology in African studies. This chapter is an object lesson in the danger of generalizing about the ethnology of Africa in the present state of our knowledge. Few anthropologists would agree that "social concepts and practices are largely an accommodation to physical and economic conditions" (p. 32). Again, the reference to the branch of anthropology "which concerns itself with existing peoples and their social institutions" as "variously described as social, practical, and functional" (p. 42) is misleading. The founders of functional anthropology would be the first to insist that not all social anthropology is functional, or all functional anthropology 'practical.' Lord Hailey stresses throughout the need for co-operation between governments and social anthropologists in the solution of the problems confronting African administrations. He points out that "governments have, as a rule, given little direct support" to anthropological research.

This brings us to the most momentous part of the *Survey*, Lord Hailey's recommendations. Africa's problems, he declares, cannot be solved without a great deal more of intensive scientific research, both on the physical and on the social sides. Local administrations

have neither the resources nor the personnel to conduct such research. The Imperial Government must make itself responsible both for the funds and for the direction and co-ordination of research in Africa. In addition, an African Bureau should be established covering all phases of African life and all the problems expounded in this book, to serve as a clearing house for information

and as a source of assistance to scientific investigators and others concerned with African questions. The lines, along which these recommendations can best be implemented are indicated. Every member of this Institute will support these recommendations and will hope fervently that there will be no undue delay in carrying them out. M. FORTES.

ASIA.

Deutsche im Hindukusch: Bericht der Deutschen Hindukusch-Expedition 1935 der Deutschen Forschungsgemeinschaft. Berlin (Siegismund), 1937. viii + 351 pp., 120 illustrations and 12 maps.

The German Hindu-Kush expedition of 1935 consisted of Drs. Arnold Scheibe, Werner Roemer, Klaus von Rosenstiel (agriculturists), Gerhard Kerstan (botanist), Albert Herrlich (physician and physical anthropologist), and Wolfgang Lentz (linguist, ethnologist, and interpreter). The head of the expedition was Dr. Scheibe, while Dr. Herrlich was responsible for the management. This list indicates the many-sidedness of its aims and researches. The editor, Dr. Scheibe, points out that the book, being published only fifteen months after the return journey, cannot offer a detailed report, but only a descriptive account (p. 5). However, the abundant material has already been considerably worked up, and the book is rich in hitherto unknown facts, sound theories and fruitful suggestions. The principal task was the study of the inter-relationships between the wild cereal grasses and their respective cultivated varieties; to seek new cultivated plants which may be utilized for German agriculture; and to collect varieties of well-known cultivated plants so as to regain, by way of crossing, genes which might have been lost in the European varieties in the course of centuries; and, finally, to study the flora and the botanical geography of the region (p. 4). This agricultural and botanical section (by Roemer, von Rosenstiel, Scheibe, and Kerstan) covers almost half of the book. Dr. Scheibe's treatise on the methods of cultivation in Nuristan (pp. 98 *et seq.*), including valuable observations on agricultural implements (pp. 104 *et seq.*), is of special interest also for anthropologists. So is his article on domesticated animals (pp. 125 *et seq.*). Then follows a contribution to the physical anthropology and social organization of the Kafirs of the Hindu-Kush by Drs. Herrlich and von Rosenstiel (pp. 168 *et seq.*). Dr. Herrlich very scrupulously quotes his predecessors; he was also allowed to use the lists of measurements made by Professor Guha at Chitral. But for the bulk of the rich material of anthropological measurements here offered we are indebted to Dr. Herrlich himself. The whole of the material has been elaborated with the assistance of Professor Mollison and Dr. Breiting at the Anthropological Institute of the University of Munich (p. 170). The text and figures of this section are supplemented by some thirty very illuminating diagrams and excellent photographs of individuals. On p. 178 is a map of the geographical distribution of the various Kafir tribes, distinguishable by their four languages (*cf.* pp. 270 *et seq.*). The sociological chapter (pp. 220 *et seq.*) is chiefly based on G. S. Robertson in *The Kafirs of the Hindukush*. The list of the strictly exogamous kindreds (pp. 223-227) is incomplete and preliminary and will be corrected and supplemented later by Dr. Lentz (p. 225). While Dr. Herrlich refers to the older literature, his own supplementary observations must be gratefully acknowledged, especially as we come across discrepancies between older records and the present conditions, obviously indicating social changes which might have been brought about

either by evolution or else by external influences (compare pp. 221 [1] and 229 [a]). Dr. Lentz's chapter on his linguistic and ethnographical studies in Nuristan (pp. 247 *et seq.*) is a masterpiece of philological exactness, and contains many welcome complements to the older literature. Dr. Lentz was also responsible for the ethnological researches and his skill and many-sidedness deserve our admiration: he took 1,400 photographs and over 100 gramophone records of national airs, chiefly from Nuristan (p. 252). His special attention was paid to the nearly extinct scattered languages, or dialects, such as *Zimake*, *Gelangeli*, *Gawarabati*, and *Traieguna*, though his observations thereupon are brief and preliminary (pp. 273 *et seq.*). The final part of Dr. Lentz's article is particularly worth mentioning; it deals with the calendar systems in Nuristan and their terminology (pp. 277 *et seq.*). One interesting detail: the author suggests that the Kati and Paruni calendar systems are based on the alpine economy, in contrast with other systems in the country obviously intimating agricultural origin (p. 280). A short chapter by Dr. Sachtleben is a survey of the entomological material collected by Dr. Scheibe, and, finally, geographical observations by Drs. Herrlich, Lentz, Roemer, and von Rosenstiel include a list of 982 place-names in phonetic transcription, in various dialects, with an alphabetical index. Six maps are attached in a folder. There is no general index, but the arrangement is so clear that the reader will easily find his way.

This is a book brimful of facts and rich in suggestions, on which the fieldworkers and authors must be congratulated, and it is only the beginning.

LEONHARD ADAM.

Buddhist Art in Siam: a Concise History. By Reginald Le May. With a foreword by Sir John Marshall. Cambridge University Press, 1938. 80 pp. of colotype illustrations. Price £2 2s.

This remarkable study by a very able and enthusiastic archaeologist of the evolution of the *Buddharupa* in Siam covers a period of over a thousand years. For about three centuries this particular branch of the plastic art has been decadent, and most of the images of the Blessed One that appear in Siamese temples or domestic shrines possess a pietistic rather than an æsthetic value. But, as Dr. Le May so extensively shows, the iconography of Siamese Buddhism before about 1600 can vie favourably with the iconography of the best periods of Indian and Javanese Buddhist art.

The uninitiated are apt to think of Siam as a country of a single people and a single culture. But the Tai ('Free'), who form the main stock of the modern Siamese nation, did not leave their aboriginal home in Southern China until several centuries after the beginning of the Christian era, and many of them emigrated into Siam under the pressure of the Mongol conquerors of China in the 13th century. Other cultures flourished on Siamese soil long before the advent of the Tai. Leaving out of account the prehistoric Lawās, the Môn, emigrants from Eastern India through Burma, are the earliest representatives of a Buddhist civilization in Siam. Afterwards we encounter the Khmers of Cambodia, who

for a few centuries extended their sway over the greater part of the country. In the 13th century the Tai gained the ascendancy, and a hundred years later the Khmers were driven from Siamese soil and had now to acknowledge the suzerainty of their former subjects.

It is Dr. Le May's task to show how the cultures of these various peoples are reflected in the iconography of Siamese Buddhism. There are a number of cross-currents to be taken into account. The Môn art betrays Pallava and Gupta influences. In the earlier iconography of the Tai, that of Chiengsen, the art of Pala Bengal is traceable, while Suk'ot'ai iconography, developing a little later, is largely indebted to Ceylon, concerning whose cultural and other contacts with Siam Dr. Le May gives some interesting facts. The flame *urni* of the Suk'ot'ai Buddhas is clearly of Sinhalese inspiration, despite the differences in the manner of rendering it. The severe Khmer Buddhas are in marked contrast with the feminine faces of those made by the Môn, though examples are known where traces of the reaction of the earlier culture on the later are obvious enough. At U-T'ong the Khmer taste lingers long after Khmer rule has disappeared, and the Khmer-Tai art of U-T'ong only changes very gradually into an art that is wholly Tai. In 1350 A.D. a prince of U-T'ong makes Ayudhya the capital of the principal Tai kingdom, and this place remains the chief city of Siam until its sacking by the Burmese in 1767. With the Ayudhya period Dr. Le May brings his fascinating story to an end.

A. D. HOWELL SMITH.

Durch die Steppen der Mongolei. By Gösta Montell, with a foreword by Sven Hedin. Translated into German from the original Swedish—(*Våra vänner på stäppen*)—by Dr. Theo Körner. Stuttgart (Union Deutsche Verlag), 1938. 177pp. Illustrated.

This is primarily a travel book and as such makes attractive reading. For the anthropologist it contains nothing of any great importance.

Dr. Montell was a member of Sven Hedin's 1930 Expedition to Mongolia, and much of his time was taken up with the building of a life-size model of a Lama temple to satisfy the eccentric interests of the Chicago millionaire who was financing the Expedition. The present book is the account of a journey from Peking to Etsingol and back, with the famous George Söderblom, acting as guide. The latter is far too experienced a campaigner to let anything serious go wrong with his organization, and the journey in consequence appears somewhat dull.

Most of the items of ethnographic description are too summarily treated to be of scientific importance, though there is an interesting chapter on felt manufacture. The social aspects of Mongol life are dismissed in such generalizations as—"die mongolische Frau regiert im Hause und ist nur ihrem Gatten untertan" and "auch nicht immer. Ungefähr wie bei uns." The author makes the interesting suggestion (p. 93), unsupported by any statistical data, that syphilis is bringing about a rapid depopulation of the whole area.

The book contains a large number of magnificent photographs. E. R. LEACH.

GENERAL.

Civilization and Disease. By C. P. Donnison, M.D., M.R.C.P. London: Baillière, Tindall and Cox, 1937. xiii + 222 pp. Price 10s. 6d.

84 Although much has been written in recent years on the subject of civilization and disease, there is, unfortunately, not a little of it that is largely conjectural by writers who have had no personal contact with life among primitive peoples. The author of the present volume is in quite a different category from these theorists. After being in medical charge of a native reserve in East Africa for some years, and becoming familiar with the diseases to which the natives there were commonly subject, he returned to England to practise, and found that not only were many diseases, of common occurrence among natives in the Tropics, very rare in England, as might be expected, but that other diseases relatively prevalent in England were comparatively unknown in Africa. This contrast in experience aroused his interest in the subject of the racial incidence of disease and a further study of the problem has convinced him that a large proportion of these diseases of common occurrence in England can best be understood as products of a change in biological environment, a change which can be usefully described as 'civilization.' Though in many of these the evidence of relationship cannot be considered well established in a small but important group a close association could be shown clearly to exist. These diseases fall into two groups. From the first or organic group he selects for a special study four such diseases in which the specific difference in racial incidence is fairly definite; these are high blood-pressure (hyperpiesia), diabetes mellitus, Graves' disease (exophthalmic goitre), and peptic ulcer. These are all conditions that show a close aetiological relationship in that functional disturbance seems to precede any morbid changes.

The result of his study is to emphasize the importance of psychogenic factors in the development of these con-

ditions, factors which probably exert their influence through hypothalamic centres controlling the endocrine and autonomic nervous systems. The other group of diseases that show a close relationship with civilization comprises the functional disorders usually classed under the heading of the psychoneuroses. Though the customary differentiation of the two groups organic and functional or psychogenic is still recognized by the author, he doubts its validity and expresses the view that the principle of the psycho-somatic unity of the individual is obtaining increasing emphasis in medicine.

The inquiry brings out very clearly the accuracy of the conception of the psychoneuroses as diseases of social life. They appear essentially as a maladaptation of the human mind to the social organization, arising from difficulties encountered in effecting the psychological adjustment required under the altered conditions induced by civilization.

The author then proceeds to review in a brief but adequate manner the different theories of origin of the psychoneuroses. The views of McDougall, Freud, Jung, Suttie, and Adler on the question are considered and discussed. The author finds most support for the Adlerian view that it is essentially a defect in social development, a failure in adjustment to a social environment. To him Adler's conception appears to be based on a fundamental biological outlook of a much sounder nature than that of the other psychological schools, and also affords a more adequate explanation of the racial incidence of psycho-neurotic disorders.

The problem of the causation of the psychoneuroses is closely related to that of the psychological aspects of the social development of the human race and the author proceeds to discuss theories of the origin of culture and civilization. Of the factors conditioning cultural development two are regarded as being of supreme importance, one the influence of natural selection on communities and cultures as the units in the struggle

for existence, the other social heredity or education. The survival of the modern type of man, ancestral to ourselves, seems to be most readily understood by successful communal activity on the part of the weaker race, a form of activity to which the physically stronger species had failed to adapt themselves. The fundamental factor conditioning the development of culture and civilization is a psychological adjustment in the

human mind in which urges that are vital in the struggle for existence on an individualistic basis have to undergo inhibition to allow the development of other inherent urges favouring efficient action in the community.

The book provides a very illuminating and comprehensive study of the relationship between civilization and disease and can be highly recommended to those interested in the subject.

M. Y.

CORRESPONDENCE.

Eolithic Man.

85

SIR,—Some years ago there appeared in the *Memoirs and Proceedings of the Manchester Literary and Philosophical Society*, LIII, ii, a paper by Mr. Barnes and Sir Hugh R. Beevor, entitled "The Dawn of Human Invention. An experimental and comparative study of Eoliths." The paper contains 34 pages, and is a closely reasoned, exhaustive and important contribution to the elucidation of the problem of the eoliths. In it the authors state "We hope to show that the existence of Eoliths as the work of man is a fact which is capable of scientific demonstration." They draw attention to the secondary working on eoliths which is "identical in character to that found on accepted Palaeolithic and Neolithic forms" and mention their association with palaeolithic hand-axes. As to certain 'bulbed eoliths' found at Croxley they state "far more numerous than palaeoliths are these eoliths; the workmen sifting the gravel roughly at the lowest levels where the eoliths are most numerous will pick out about five to the cubic yard, most with the bulb of percussion. They are quite un-rolled and rarely scratched. The presumption accordingly is that we are close to the habitat of their owners . . ." Having dealt with the objection urged against the authenticity of eoliths because of their large numbers, the authors divide these primitive artifacts into four main classes, containing seventeen types of implements. They state that several hundred specimens from Croxley "fall readily and almost completely into the various divisions of the classification already referred to." They claim, moreover, regarding the Croxley eoliths, that "When a good tool is found, in this pit at all events, with the special characteristics of its class, but without the bulb of percussion, the presumption must be that it is man's design, and not due to a chapter of accidents." As to the effects of unguided natural forces having flaked the eoliths, the authors, after enumerating and dismissing them all, including the arguments put forward by Mr. Hazzledine Warren in a recent paper, as inadequate, state that "striation and 'ladder fracture' are concomitants of ice action, and eoliths subjected to this agent are easily recognizable." And again "soil abrasion by the pressure and movement due to soil creep or foundering is an agent of wider application than the last named, but an examination of deposits which have been subjected to considerable thrust shows that the flints have been splintered and shattered, but not chipped or flaked." The authors make it clear that, in their opinion, the eoliths found in Oligocene, Miocene and Pliocene deposits are of human origin. From the above necessarily inadequate summary of Mr. Barnes' and his colleague's paper, which all those interested in the eolithic question should study, it is clear that, in those days, Mr. Barnes was what might be termed a 'root and branch' believer in the eoliths. Everyone is, of course, entitled to change his opinion, but it is, to say the least of it, disturbing to try to believe that all the carefully

marshalled facts and arguments in the paper mentioned, were, as he now erroneously classifies those put forward in defence of the pre-Crag implements, 'purely subjective' (*Nature*, 8 April, 1939, p. 593). But as to the latter specimens I have nothing to add to or to retract from my memorandum recently circulated.

J. REID MOIR.

Food Classification in N.E. New Guinea.

86

SIR,—In 'The Mountain Arapesh' (p. 184) Dr. Margaret Mead mentions "a food classification which is prevalent throughout this region (N.E. New Guinea), that is, a division into basic carbohydrates and garnish. In the first class fall sago, yams, taro, sweet potatoes and green bananas; all other foods, among them all meats, are classified as garnish. . . . This division of foods produces a demanding state of mind, even among the worst-fed people, for they are concerned not only with quantity and quality, but always consider whether both categories, basic food and garnish, are represented."

It would be interesting to trace the distribution of this dichotomy. It is general in the Upper Nile region. The staple food of the Moslem negroes is bread, in the shape of cakes baked on a griddle. This is known as *kisra*, from the Arabic root *kar*, to break or divide. Garnish, whether animal or vegetable, is known as *mudh*, from the root *mlh*, to be salt, pleasant; so far as I know, these words are not used in this sense outside the Sudan.

The pagan negroes are ignorant of baking; their staple is a thick porridge of boiled flour, but they maintain a clear distinction between this and the other foods which provide their garnish.

RAGLAN.

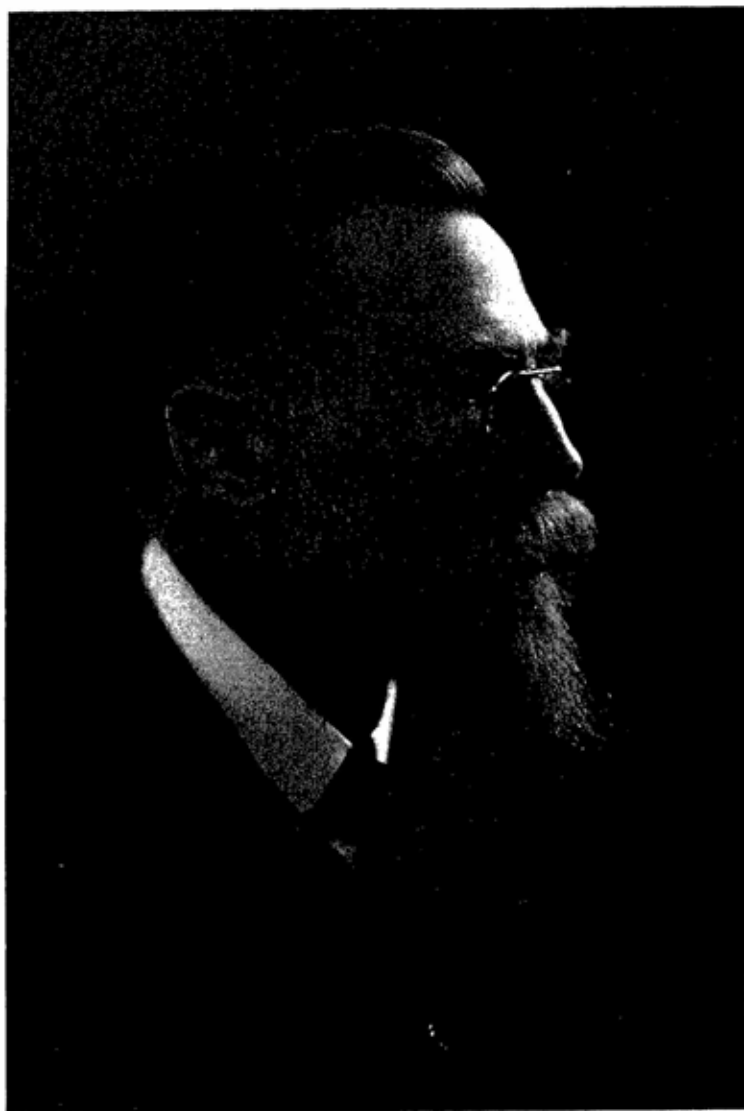
Another Note on the 'Mari Lwyd'. (Cf. MAN, 1939, 33.)

87

SIR,—Mr. Iorwerth C. Peate suggests that "unless some totally new light is thrown on the origin of the name *Mari Lwyd* it seems to me that there is every reason to suppose that the explanation that it means 'Holy Mary' is correct." May I draw attention to a suggestion made by Mr. Timothy Lewis, Reader in Celtic Philology and Palaeography, University College, Aberystwyth, that the origin of the name is to be found in *Merry Lude*, one of the many obsolete or obsolescent English words which have survived in Welsh?

This origin suits the custom very much better, for it has nothing to do with the Virgin or the Flight into Egypt, as often stated. Mr. Peate might have added in his previous article (MAN, 1935, 88) that the horse is a well-known symbol of fertility, originally of divine origin. This is no doubt the reason why in Wales *Mari Lwyd* (or the 'Hobby Horse,' of which it is a version), has been connected with the wassailing, also a fructifying ceremony, and is taken round during the Christmas season, and not (as elsewhere) in Spring or at Whitsuntide.

MARY WILLIAMS.



JOHN LINTON MYRES

WYKEHAM PROFESSOR OF ANCIENT HISTORY IN OXFORD
PRESIDENT OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1928-31
SECRETARY, 1900-03. EDITOR OF 'MAN', 1901-3, 1931-39

Photograph by Lafayette Ltd., London

MAN

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ORIGINAL ARTICLES.

With Plate G.

J. L. MYRES: PAST PRESIDENT OF THE ROYAL ANTHROPOLOGICAL INSTITUTE; EDITOR OF 'MAN.'

88 On the occasion of the seventieth birthday of Professor J. L. Myres, which falls on July 3rd, the President and Council of the Royal Anthropological Institute wish to offer him their heartiest congratulations, and to place on record their appreciation of the valuable services which he has rendered over a long period of years both to the Institute itself and to anthropological science in general.

When Myres was appointed Honorary Secretary of the Institute in 1900, he at once began to exert his influence on its affairs by introducing more systematic methods and promoting a definite progressive policy. The Journal was confined to papers of some length, and Myres rightly judged that there was room for a smaller publication, which should contain short articles, notes, themes for enquiry and discussion, correspondence and information on personal matters, including obituary notices. Thus in 1901 MAN came into being and quickly established its value. In alluding to its first appearance, Sir Hercules Read in his Presidential Address in 1901 said: "This departure from ancient methods we owe to the restless energy and resource of our talented Secretary, Mr. Myres, to whom we owe much in other directions also."

On his resignation from the Secretaryship in 1903, the Council expressed its indebtedness in appreciative terms (*J.A.I.*, XXXIV, 1904, p. 4).

After an interval of absence from the Institute's affairs, Myres returned as an elected Vice-President, 1921-23. He continued as an active member of the Council until in 1928 he was elected President, an office which he held for the exceptional period of three years. He subsequently acted as chairman of the Executive Committee in 1931, and in that year resumed the Editorship of MAN, introducing a number of improvements, and has continued to bear this exacting burden down to the present time.

Myres' services to Anthropology have been shown in many other ways and in various connections. He became Recorder of Section H of the British Association in 1896, where he did much to raise the scientific standard of papers and discussions. Through his position as General Secretary and as a Member of the Council of the Association he has frequently been able to exert his influence for the benefit of Anthropology.

Myres' energy and organizing ability have also been conspicuously displayed in connexion with International Congresses. Some years after the war he played a major part in the efforts that were being made to revive in a truly international form the pre-war series of International Congresses of Anthropology, which had lapsed after the Geneva Meeting in 1912. These efforts resulted in the foundation of two new International Congresses, complementary to each other, one for the Prehistoric and Protohistoric Sciences, and the other for Anthropology and Ethnology, which held their first sessions in London in 1932 and 1934 respectively. Myres has continued, as a joint General Secretary

to influence their organization and conduct, and in particular the striking success of their London sessions must be ascribed in large measure to the inspiration of his personality and untiring industry.

Of his activities outside the sphere of Anthropology it is not competent for us to speak here; but we are aware that they have been both numerous and fruitful. In recognition of his services to Mediterranean Archaeology a special volume of the *Annual of the British School of Archaeology at Athens* is being prepared and dedicated to him for publication in the present year.

His achievement, only briefly touched upon here, in carrying out so much self-imposed and public-spirited administrative work in so efficient a manner, bears witness to a brilliant mind and an abounding vitality, which seems to increase in proportion to the demands made upon it.

Anthropologists the world over are deeply in his debt, and in the name of this Institute we wish to mark the occasion by expressing our gratitude for his whole-hearted devotion to our interests, and to offer to him our best wishes for many more years of achievement and happiness.

H. J. BRAUNHOLTZ, *President*,
RAYMOND FIRTH, *Hon. Secretary*.

THEORETICAL BASES FOR AN EMPIRICAL METHOD OF STUDYING THE ACQUISITION OF CULTURE BY INDIVIDUALS.¹ *By Clyde Kluckhohn, Harvard University.*

89 With a very few notable (and mainly recent) exceptions anthropologists have failed to give systematic attention to the problem of how specific bits of culture are transmitted from individual to individual within particular societies. Such factual material as is available in the published literature is almost wholly anecdotal in character. Such general statements as have been made tend to be grossly impressionistic. A total conceptual scheme for attacking the question may be said to be non-existent. Freud, it is true, has given us (in his discussion of the rôle of the Super-Ego in culture change)² conceptual tools which seem to be generally congruent with the crude and broad empirical generalizations which we are at present in a position to make. But I would point out: first, that the mechanisms which he postulates apply primarily to the acquisition of value systems and affective attitudes toward the formal cultural structure; second, that Freud's concepts need testing upon quantities of particular data gathered in widely differing societies.

In short, I feel it is fair to say that at the moment both the substantive³ and the theoretical

aspects of socialization and culturalization (if I may coin an admittedly horrid word)⁴ acutely need investigation. It is not merely that culturalization is a subject of great interest and importance in itself. Until we have learned something about it in a detailed and comparative way, the premises basic to our discussions of culture change and development (to select the most obvious but by no means the only relevant topic in general anthropology) can have, at best, only the justification of highly imperfect inductions.

What sorts of field material will best satisfy this need? Clearly, we can not be satisfied with information which goes no further than describing in neutral tones positive acquisitions of skills and of overt standardized behaviours generally. Data must have the affect dimension and bear upon the

this paper had been written and read, but I find myself in general agreement with Fortes' and Firth's delimitation of the theory of the problem except that I differ sharply (as will later be elaborated) with the following statement: "For most problems of social anthropology 'variations are of minor importance as compared with the 'typical,' and an all-round knowledge of a 'culture is a sufficient check of typicality.'" (Fortes, p. 8.) At very least, it would seem to me that such a statement is unjustified at present in default of concrete testing of this postulate.

⁴ To a large extent I mean by 'culturalization' what social psychologists and sociologists have meant by 'socialization.' Undoubtedly socializing a young human animal consists mainly in conditioning him (in so far as possible) to the responses expected of him in a particular cultural or sub-cultural framework. But I think that the new word might have some little utility in directing attention explicitly and directly to this phase of the process.

¹ Read to a meeting of the American Anthropological Association, 28 December, 1938. The paper has had the benefit of comments and criticisms by my wife, Florence Kluckhohn.

² See, for example, *New Introductory Lectures in Psychoanalysis*, New York, 1933, pp. 90-91.

³ Fortes has recently given us admirable empirical material—M. Fortes, *Social and Psychological Aspects of Education in Taland* (Supplement to *Africa*, vol. XI, No. 4, London, 1938). This (and also Firth's excellent contribution to which Fortes calls attention—R. Firth, *We, The Tikopia*, pp. 147 ff.) I had not seen until after

emotional structure of the transmission of culture. In my opinion, life history documents which have the amplitude of detail of Dr. Dyk's "Son of Old Man Hat"⁵ will prove invaluable, probably indispensable supplements to other sorts of data. However, the length of time, quality of informant and other conditions prerequisite to securing such life histories probably mean, as a practical matter, that we cannot hope to have a very great number of such documents until the number of persons doing field research is materially greater. Nevertheless, I should like to state emphatically my conviction that the system of observations which I will suggest must continually be revised in terms of such insights as we get from careful inductive analysis of life history materials.

In the course of extended investigations of the Navaho living in the Ramah-Atarque region, New Mexico, my co-workers and I have developed a method⁶ which could be used somewhat more generally by the field worker who is not able to devote the whole or major portion of his energy to obtaining life histories but who can, perhaps, look forward to repeated visits to the same people. It hardly appears worth while to elaborate here the more technical aspects of the method,⁷ for these would vary so widely in detail from field situation to field situation. There are, however, two postulates⁸ upon which its validity must rest, and since these are of more or less universal application it seems important to bring them into the realm of conscious and explicit discussion:—

1. Even in relatively homogeneous non-literate societies there are differences in the behaviour of individuals which cannot be fully explained in terms of age, sex, and the other factors upon which sociological status and rôle depend.

2. Range of variation (in ideology, in practice, in the divergence between these two) is sufficiently

significant to make consideration of the sampling process vital.

Both of these premises merit extended discussion, but I must dismiss the first briefly. I should like, first of all, to suggest that it is not necessary, for our purposes here, to beg the question as to whether such variations rest upon inherited differences of genetic constitution, upon various accidents of the conditioning process,⁹ or upon combinations of both of these and perhaps other classes of factors. It is essential only to grant that such differences do exist and that they are worth investigating. It follows (as in the case of Professor Boas' studies upon the physical growth of children) that it will not be sufficient simply to sample a community with regard to age, sex, status, and the like. It will be necessary to follow the same children over a period of years. I concede the practical utility of the presumption that what was observed to be true of the acquisition of an aspect of culture by one individual in defined sociological circumstances would hold for a different individual in similar circumstances. I only urge testing the chance that an appreciable margin of error enters in which could be eliminated by having the same observer or observers follow the same individuals over a relatively long period.

The second postulate seems to me so critical and so scandalously neglected in the work of most anthropologists that I should like to discuss it at greater length. To begin again with a negative consideration: this premise does not imply the highly dangerous assumption that the observed incidences of any given class of behaviours would, if plotted, approximate the form of the so-called normal curve nor, indeed, of any particular curve known to statistics at present. It is premised merely that (even in numerically small and remarkably consistent and coherent societies) responses to the same situation are not identical—there are variances and co-variances and these and their frequency distributions must be taken into account.

Heretofore we have been too often content with purely formalized descriptions which give, in effect, simply the ideology of the culture—

⁹ I am thinking of this kind of possibility: that an individual A, who is approximately the equivalent of another individual, B, in so far as age, sex, status, etc., are concerned might (under defined conditions) behave differently from B because, let us say, there had been a marked age difference between his parents, whereas the father and mother of B were of about the same age.

⁵ New York, 1938.

⁶ I should like to underline the use of the indefinite article, for I wish most explicitly to disavow any messianic aspirations. I suggest in no way that this method is the only applicable or useful method—only that it is one method which, under certain conditions, has certain points in its favour.

⁷ Actually, the set of procedures involved is too fundamentally simple to dignify it by so pretentious a label!

⁸ There are, of course, other assumptions, but—so far as I am aware of them at least—they would with little doubt be accepted by almost all anthropologists.

perhaps as conceived by a very few informants. The highly meaningful question of 'goodness of fit' between theory and practice has almost entirely been passed over. Girls in a particular tribe are expected at a certain age to learn from their biological mothers such and such technological skills. It is very interesting and very important to know this, but we can hardly hope to get a satisfactory intellectual grasp of the behaviours in question unless we also have concrete data indicating what proportion of the actual individuals in the tribe in question follow out more or less the letter of the ideal pattern, what proportion deviate somewhat (and in what directions), what proportion disregard the ideal patterns almost entirely. We have too many statements of the form 'The Navaho learn this or that from their fathers (or their mothers).' Now such sweeping generalizations have little scientific meaning unless we are given controls, unless we are given some indication of how many concrete observations formed the basis for such statements of uniformities. Clearly, if such statements are to be used by comparative sociologists making inductions as to very general regularities in human behaviour, a distinction must be made between general statements based on the word of one informant out of a population of 50, one informant out of a population of 1,000, twenty informants out of a population of 400, and the like. Similarly, general statements based on observation of one relevant incident are surely of a different order from those based on observation of a hundred incidents. And there remains the whole question of differentiating between generalizations based upon statement, generalizations based upon observation, and generalizations based upon both statement and observation. Almost never in ethnographic monographs does the author consistently give the reader control information of this sort. We have been insufficiently tough-minded in accepting 'general knowledge of the culture' as a substitute.

Now in the case of someone like Malinowski who has lived long in the society and who speaks the language we are, in the greater number of cases, probably not unwarranted in taking his word (or implicit suggestion) that a given incident is typical or atypical. And yet—in terms of what we know and suspect as to the intrusion of the 'personality' of the field worker into the selection of his data and the crystallization of his

dominant impressions¹⁰—would we not be justified in demanding—even from this most brilliant of field observers—some dispassionately factual controls of this sort? Malinowski himself remarks that "The competent and experienced ethnographer . . . will easily see from the data presented throughout this book where the documentation is thin and where it is full."¹¹

But isn't this entirely too rough and ready a sort of test for even a would-be science? Malinowski normally documents his 'context of situation' in almost every particular. This is admirable, but I sometimes suspect that this sureness of documentation (together with a general impression of firm mastery of his data which he manages to convey to almost every reader) makes Malinowski a trifle more convincing than a really cold-blooded scrutiny of his work would warrant. A distinguished anthropologist has been heard to remark, "When you read 'The Argonauts' you felt that the kula is everything in the Trobriands, when you read 'Sex and Repression' or 'The Sexual Life of Savages' you decided it was really sex that counted. Now—with 'Coral Islands and their Magic' you have to conclude that, after all, neither sex nor the kula are really central—it is magic." Now no one (and certainly not the anthropologist whom I have quoted) would maintain that these remarks constitute a fair and balanced verdict on Malinowski's work. But there is, nevertheless, a certain grain of truth which bears on what we are talking about. Until Malinowski gives a synthesis in which he shows us—in a steadily maintained perspective—how these various elements of action which have formed the central motifs of his various books are interrelated one with another, how and where one 'interest' prevails over or is subordinate to another, in some of us a nasty suspicion will pop up from time to time that Malinowski's conceptual scheme

¹⁰ For an illuminating discussion of these considerations see C. Du Bois, *Some Psychological Objectives and Techniques in Ethnography* (Journal of Social Psychology, Vol. 8, 1937, pp. 285-301).

¹¹ B. Malinowski, *The Sexual Life of Savages* (3rd. ed.), London, 1932, p. xlviii. I am referring, in this discussion, only to what seems to me a faulty explicit basis for generalization within the group he is describing—not to any tendency on his part to generalize from the Trobriand Islanders to non-literates as a whole. To the last imputation he has replied rather recently—see Preface to I. Hogbin's *Law and Order in Polynesia*, London, 1934, pp. lvii and lviii.

is rather far from a neutral, uniform set of operations consistently applied to various assemblages of discrete data.

And it is not because Malinowski seems to me peculiarly vulnerable that I have singled him out, but rather because in my opinion we have more to learn from him (all things considered) than from any living social anthropologist. It would be quite improper to call Malinowski's approach anecdotal. Would it, however, be very far from the truth if we described his method as that of the well-documented anecdote set firmly in a ramified context? There is surely a tinge of the anecdotal so long as an ethnographer gives us no check upon his statement or implication that a behaviour or a patterned set of responses is or is not typical—in the sense where type is 'a measure of central tendency in a range of material.' At least until abundant induction assures us in how far we can disregard considerations of this sort we require documentation in roughly this form: 'Under such and such specified conditions I observed (or was told by so and so) that Navahos A, B, C . . . X acted thus, while Navahos 1, 2, 3 . . . 38 responded to the relevant stimulus in this slightly different fashion.'

It is from such a theoretical background that the method which I propose to outline in a schematic way was developed—after a good deal of preliminary fumbling. The method has two separable aspects. The first consists merely in extended and systematic analyses of the relationships between teacher and learner in the various activities where the learning process is recognized as such.¹² From exactly whom did every ceremonial practitioner learn each portion of his ceremonial knowledge? Who taught every weaver, every silversmith, every potter, every basket-maker and the like? What uniformities of kinship or sociological or other patterned relationship emerge from sifting the data bearing on each case? Can we say, for example, that in 10 instances out of 28 ceremonials were learned from persons not defined by the culture as related, in 7 instances from the father, in 4 from the mother's brother? It seems to me that such a statement is less remote from the actualities than the sort of bald generalization one meets with so often. Numbers and figures might, to be

sure, be very misleading unless adequacy of sample were demonstrated. My procedure, for the moment at least, is to rule out the problem of sampling here by gathering every (or virtually every) relevant datum in the society being studied.

The second aspect of the method is slightly more complex. There are about 400 individuals in the community in question, and of the 150 odd children putatively under sixteen years of age I selected 24 boys and 24 girls, divided equally between the following six age groups: newly-born infants, children under a year of age, children over one year but unweaned, weaned children under five years of age, children between five years of age and pubescence, adolescents. Adopted children and step-children are included. In making the selection care was taken to ensure that the various sub-local groups and four economic strata were represented in approximately equal numbers.

These 48 children have represented a kind of focus of interest during successive seasons of field work but not a project demanding exclusive attention. In fact, I feel that in the long run the material is likely to be the more satisfactory because it was obtained (for the most part) incidentally. While we have made an effort to gather certain information about each child rather systematically, my co-workers and I have not pre-occupied ourselves in so concentrated a fashion as to risk the danger of forcing our data (if only by unconscious selection) into a Procrustean bed of pre-conceived notions. Rather this work has been kind of field knitting,¹³ as it were, a set of tasks to which we could turn in otherwise idle moments while visiting certain families. For any ethnographer or group of ethnographers to say that they record 'everything' in the field is, of course, a monstrous self-delusion. If truly everything observable were noted down, the

¹² For one such analysis see C. Kluckhohn, *Some Personal and Social Aspects of Navaho Ceremonial Practice*, Harvard Theological Review, January, 1939.

¹³ Here I refer, of course, specifically and only to the single problem of the acquisition of culture. Naturally I regard the general principles I have developed as far from 'incidental.' We have endeavoured to apply them in organizing field work generally and in analysing field data. See L. C. Wyman and C. Kluckhohn, *Navaho Classification of Their Song Ceremonials* (Memoirs, American Anthropological Association, No. 50, 1938); C. Kluckhohn, *Participation in Ceremonials in a Navaho Community* (American Anthropologist, vol. 40, 1938, pp. 349-370); *Navaho Women's Knowledge of Their Song Ceremonials* (El Palacio, vol. 45, Dec. 7, 1938, pp. 87-93).

writing of field notes would take as long as the carrying out of all the actions. At best, the conception of recording everything about everything is a counsel of perfection. One can, however, record very nearly everything (so far as one's unconscious blind spots will allow!) bearing on certain selected universes of behaviour. One such for us¹⁴ is the doings and sayings of these children—and of adults directly interacting with these children.

We make a point (in the course of attaining other objectives) of spending a somewhat disproportionate amount of time with the families involved. We also have opportunities for seeing the children at various ceremonial and other gatherings. On every occasion when we have the opportunity to observe the child directly¹⁵ we endeavour to write down everything which we see and hear with particular reference to the interaction of the child with older individuals.¹⁶ We also get interview material (both active and passive) from the children when they are old enough to talk. This we supplement with opinions of the children collected from the adults who are with them most. Our effort, I repeat, is to record everything seen and heard, but, because at most this can be but a trifling sample of the child's total behaviour, and also because we are convinced that even under the most favourable conditions an observer will not record everything which he actually sees or hears or feels, we have prepared rather extensive lists of topics which we

believed to be of rather crucial importance. We do not regard these as complete by any means, but we feel that if we keep them (as a minimum) tenaciously in consciousness we shall be likely to miss less. The sheer printing of the lists would occupy a number of pages, but some excerpts (printed just as they occur on the memoranda we take into the field) will suggest the scope and kind of behaviour we are trying to cover.¹⁷

Has the child remained with the biological mother? Was it suckled by others than the biological mother and if so by whom, under what circumstances, for how long, etc.? How many 'mothers' in the classificatory sense were present in the extended family during what age periods? Detailed observations on interaction with these. Has the child had stepfathers and, if so, how many, at what ages, etc.? Has the mother been, without a husband at any period? Observations of suckling behaviour in infants—does the mother appear to find pleasure therefrom? Is the infant suckled, day or night, whenever it cries? Does the infant ever manifest aggression with respect to nipple or breast? Sample records of how many hours and minutes out of 24 the mother is actually in direct physical contact with the infant? For how many minutes is the mother out of sight? Proportion of time spent by the infant in being nursed, being fondled, sleeping, and the like. Particular attention to groupings of children with one another and with adults in regard to birth order, sex, siblings, other sociological relationships. Actual instances of discipline (and praise and blame generally) by whom? Under what conditions? Are there threats of punishment? By whom? Carried out? Statements by children as to favourites among adults and among other children—to what extent are others consciously taken as models? Concord with observed behaviours. Expressions of rivalry in children? Evidences of competitive and aggressive behaviour. Full accounts of somewhat formalized teaching of children. What is kept secret from children of various ages? Are male and female children weaned at about the same period, other things being equal? Is there any evidence that male children find the weaning

¹⁴ To date four observers (one a woman) have participated in the investigation. Of these, two (who have spent nineteen weeks in the field) did not have the list of specific children, but were instructed to be at particular pains to record the actions and speech of all children. It is felt that these data afford a measure of control over those more pointedly gathered.

¹⁵ Although the bulk of our field work is necessarily done during the months of June, July, August and September, I have been among this group of Navaho at least once during every month of the year, and before the study is completed I shall systematically observe these children during non-summer months. It would therefore seem possible to make most of the corrections necessary for distortions consequent upon the fact that most of the data have been gathered during a particular season of the year.

¹⁶ For we are convinced of the essential soundness of Dollard's presumption: "Social patterns are transmitted by persons who become the targets of positive and negative feeling from the child as the result of facilitating and frustrating behaviour on their parts." John Dollard, *Hostility and Fear in Social Life* (Social Forces, vol. 17, 1938, pp. 15-27), p. 15.

¹⁷ The phrasing of a number of questions is borrowed almost completely from Audrey Richards, *Hunger and Work in a Savage Tribe*, London, 1932. In our endeavour to 'ask the right questions' we have found this book (along with books by Malinowski, Margaret Mead, and John Dollard) particularly helpful.

process more traumatic than female children (or *vice versa*)? After a child is weaned—any attempt to touch or caress the mother's breast? Other evidences of symbolization of the breast? Instances of parents (or other elders) competing for the child's attention? How and when is physical modesty taught? After weaning, what persons actually give the child food? To what differing extent do the various children seem to experience satisfaction or frustration in activities common to all? Evidences of leadership. Sharing of food and of property. With what elders is conversation carried on at different ages, for what duration, and on what topics? Amount of work demanded of children and degree of responsibility involved. Does a distinction seem to be made in the rewards for accomplishment by individual initiative and by co-operative effort? Cases of play being regulated by adults. Behaviour of adults with reference to quarrelling, bullying, and the like on the part of children.

Already we have embarrassingly copious notes on these and many other topics (including, of course, the more obvious ones such as date at which walking, talking, sphincter control, and the like began; thumb sucking, nail biting, and other minor aberrations). It will be seen that many of these foci of observation will tend toward providing highly detailed documentation on the extension of behaviour patterns toward wider and wider circles of individuals. It is also patent that many converge on two crucial questions: is there evidence that various external stimuli are associated with primary biological impulses? What are the chief foci round which the rudimentary sentiments of the child appear to form? A preliminary analysis of the material indicates certain rather striking and hitherto unrecognized patterns in the development of Navaho children and in the transmission of culture in both its structural and affective aspects. Numbers of instances are such that (for the most part) analysis is simple, though tedious, for it proceeds largely by simple induction and by the method of agreement and difference.¹⁸

May I be permitted, in conclusion, to restate in another and more general way the theoretical

bases for this method? If we are to deal with any problem (such as that of the acquisition of culture by individuals) in a way which is reducible to actual human behaviours, generalizations must be given a quantitative basis. In respect to any particular class of behaviour the range of variation, the frequency distributions, and something comparable to the 'standard deviation'¹⁹ must be indicated—even though in many cases the data can provide only the roughest of first approximations to these categories. It can no longer be regarded as adequate for a field worker to assure us that a specified response is 'typical.' Does he mean to define typical in terms of operations comparable to those by which the statistician defines 'mode' or to those by which the statistician defines median or one of the several means? How rich or how meagre are the numerical bases for types so construed?

To say that an attempt must be made to give generalizations a quantitative basis is not to suggest that ethnographies should consist solely of horrendous masses of figures. It seems to me legitimate and desirable that the field worker should give us his impressions at various stages of his work, that he should by any means at his command attempt to communicate to us the 'feel' of the culture as he got it. We must demand, however, that 'impressions,' 'hunches,' and the like must be labelled as such. We must know clearly upon what more or less objective ground we stand at every point in the presentation. This means, indeed, that some studies in social anthropology will make less racy reading than in the recent past. Social anthropologists have been a little too ready to skim the intellectual cream. At least some social anthropologists must devote rather more attention to seeing how much of nutriment can be obtained from rigorous separation of the skim milk of field observations. Some of us must, I think, be content to work more patiently, less spectacularly on smaller canvasses which we rework for many seasons. To reverse a point made by Lasswell, I suggest that anthropology must supplement its *extensive* excursions with more *intensive* penetrations.²⁰

¹⁸ Eventually we hope to check conclusions reached by such analysis of the type of data we have been collecting by controlled experiments of the sort recently described by Murray. See Harry Murray, *Explorations in Personality*, New York and London, 1938.

¹⁹ 'Standard deviation' is listed only as suggestive of the kind of problem involved—it is not to be taken as implying the assumption of 'normal' distribution.

²⁰ H. D. Lasswell, *World Politics and Personal Insecurity*, New York, 1935, p. 210.

THE COLCHICUM CROCUS AT KNOSSOS.
Illustrated.

By Professor R. M. Dawkins, F.B.A.; Oxford.

90 In *The Palace of Minos at Knossos*, Vol. IV, p. 132, Fig. 100a, Sir Arthur Evans gives a drawing of a Polychrome Middle Minoan IIA cup of eggshell ware, the outside of which is decorated by a pattern of wavy lines on the usual black ground; the spaces between the lines are filled by what the excavator has recognized as some kind of flower springing from a bulb; below the bulb is a 'bulbous protuberance,' in fact a kind of spur. One of these flowers with the bulb and the spur below is reproduced here in Fig. 1b, the flower being drawn perpendicular, and not as it is on the vase in a horizontal position. This spur or protuberance makes it clear to me that the exact flower intended is some species of *Colchicum*, the 'autumn 'crocus,' and Fig. 1a is a drawing, from the life, of a flowering *Colchicum* bulb, the stalk being for convenience sake somewhat shortened, and the flower shown as half closed, and not as it is in sunshine and when quite mature, widely open with the petals extended. It will be seen that at this period of flowering the bulb has a spur below, from the point of which the flower itself springs, the lower part of the stem being accommodated in a groove in the side of the bulb. The drawing was made from a large-flowered *Colchicum* which has been established now for many years in a garden in North Wales: the authorities at the Kew Herbarium, judging from the flower alone, take it as being *C. speciosum*, a native of Asia Minor and the Caucasus. The resemblance between it and the flower on the cup is striking, although of the exact species of the Minoan flower it is impossible to be certain. Sibthorp (*Flora Græca*, IV, p. 43) figures *C. latifolium*, and his drawing shows the spurred bulb; Heldreich (*Die Nutzpflanzen Griechenlands*, p. 6) mentions *C. parnassicum*, *C. latifolium*, and *C. ligulatum*, as found on various Greek mountains, but I can learn nothing of what *Colchica* are found in Crete.

The Minoan artist seems to have exaggerated the size of the spur, and the triangle he puts in the middle of the flower corresponds to nothing in Nature unless it be to represent the paler eye of the flower. The narrowness of the petals, as opposed to the wider petals of *C. speciosum*, may be accurate; some species have very narrow petals, which give the wide-open flower

a very starlike effect. The two upright lines made on the side of the bulb by the edges of the groove in which the stem lies have been noticed by the artist, but he has drawn them horizontally. It is likely that he was copying not a living

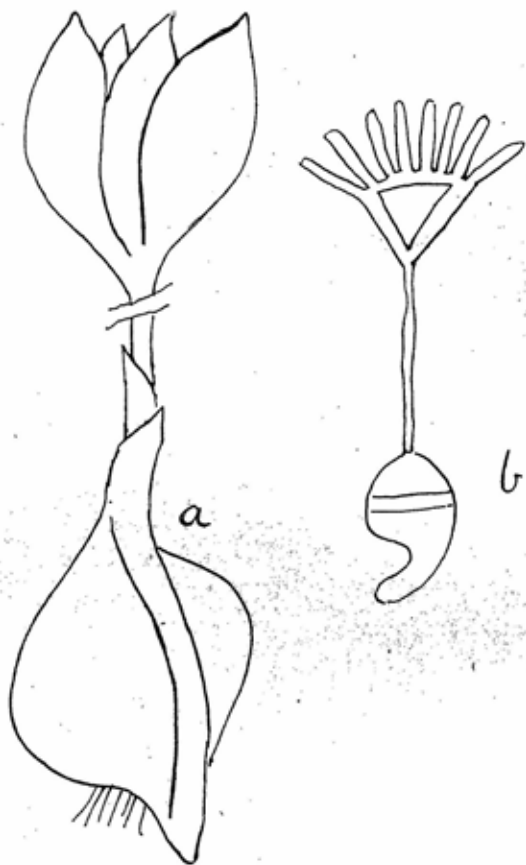


FIG. 1. COLCHICUM BULB AND FLOWER: (a) FROM LIFE, (b) ON A PAINTED VASE FROM KNOSSOS.

flower but the flower from an older vase, and no one can say at how many removes from actual Nature he was working. But the resemblance in all the details is so close that there can be no doubt that the flower intended is some sort of *colchicum*. Sir Arthur Evans has contented himself by saying that it "seems best to recognize" here a conventionalized iris flower.

One more point may be suggested. If the bulb is properly supported in water, the *colchicum* will flower in a vase or basin without earth, and bulbs for this purpose are in fact on sale in London. To judge from their art, the Minoans

had a great feeling for flowers, and on the use of flowers for the decoration of Minoan palaces Sir Arthur Evans has some remarks in *The Palace of Minos*, Vol. III, p. 278. It seems possible that they used flowering *Colchicum* bulbs as an indoor ornament, and this would further explain how the artist was familiar with a part of the plant generally hidden fairly deep in the ground. A bucket-like vase of Middle Minoan III date found in one of the houses at Palaikastro is relevant here.¹ The pattern on

¹ There is a drawing of this vase in *The Unpublished Objects from the Palaikastro Excavations, 1902-1906* (The British School at Athens, Supplementary Paper, No. 1, issued with *B.S.A.*, XXIV, 1923), p. 20, plate XII.

THE SKIN OF RE-BIRTH. By Maurice Canney.

91 The use made of skins in Africa, as described by travellers and ethnologists, is particularly interesting, because its significance is unmistakable. It has been noted among the Bantus that children, before they reached the age for circumcision, had to go through a ceremony the name of which means 'to be born again.' The father killed a male sheep, and three days later the child was invested with part of the skin and with the skin of the big stomach. But before this was done, it had to go and lie by the side of its mother on her bed and cry like a new-born infant. The skins were worn for three days, and on the fourth day the father cohabited with its mother.¹

In the funeral ceremonies of elders the burial was not complete without a skin. The skin of a large male goat would suffice; but, if the family could afford it, the skin of a bullock would be provided in which to bury the corpse. The corpse was laid out in the doubled-up or pre-natal position, and the skin of the raw ox was arranged with the hair-side upwards. When the grave had been filled in, elders poured on it honey and cooked fat. Hobley, *l.c.*, p. 98 ff.

The women wore either skin aprons of slit skin, or skin shawls, decorated or plain. The men wore cat skins, behind and before, or other skins.² Since skins figure in re-birth ceremonies, it may be conjectured that the wearing of skins is not merely for clothing or ornamentation. Skins have a life-giving and magical significance.

¹ C. W. Hobley, *Bantu Beliefs and Magic*, 1922, p. 78f.

² Dugald Campbell, *In the Heart of Bantuland*, 1922, p. 147.

the vase is in white paint on a red ground. On each side of the walls of the vase between the horizontal handles is a large bull's mask with a double axe between the horns hanging from above. Beneath the handles there is on each side a rosette of openings, and all round them sprays of leaves and daisy-like flowers are so disposed that they seem protruding from the holes. When I published this vase I suggested that it was some sort of flower pot: a bunch of real flowers could be placed in the vase and from these holes in the side painted flowers would seem to be thrusting themselves out; perhaps by the side of real ones.

Among the Ila-speaking peoples of Northern Rhodesia, it is recorded, a corpse was put first on three dry skins and wrapped in a blanket. After this it was covered with shells and beads and by four more blankets. A great slaughter of beasts took place at the funeral. Five large oxen were killed immediately, and were called 'the wrapping-up cattle,' because their skins were used to lay at the bottom of the grave and to wrap round the corpse. The corpse was arranged, wrapped in a skin, in the pre-natal position.³

Among the Lango, it was noted that the corpse was carried to the grave in the sleeping-hide of the deceased, and the hide was buried with him. Over the grave a sheep was killed for the funeral meal. The skin of this sheep was worn afterwards for a time on the head of the nearest relative.⁴

One is inclined to see in this significance attached to skins the survival of an idea prevalent in ancient Egypt. In the Legend of the Wanderings of Isis in the Delta, when Horus appealed to her for help, she said to him: "No evil thing of any kind whatsoever shall happen unto thee [for] there is in thee the essence [or seed] of him who hath made to exist the things which are; thou art the son of him that is in Mesqet [the name of the bull's skin in which the deceased was placed to secure for him the new life], who came forth from the celestial abyss

³ E. W. Smith and A. M. Dale, *The Ila-Speaking Peoples of Northern Rhodesia*, 1920, vol. ii, pp. 104, 110.

⁴ J. H. Driberg, *The Lango: A Nilotic Tribe of Uganda*, 1923, p. 167.

"of water."⁵ In the Egyptian religion the most important of the rites of initiation was one called the mystery of animal re-birth. This is often depicted in the Theban tombs. An officiating priest is drawn along on a sleigh, and is represented as crouching under a skin in the same recumbent position as the fetus in a womb. When he comes forth from the skin, he is supposed to be born to a new life. Thus he symbolizes Osiris being conceived anew and reborn.⁶

In India skins have the same significance. When a young Brahman is invested with the sacred thread, he is given the skin of an antelope or a piece of one. This is threaded on a string and hung round his neck. At a Brahman wedding the young couple should sit on the hide of a red bull. Again, when a worshipper prepares for his devotions by sitting on a low stool, the stool should be covered by the skin of an antelope.⁷ That a skin signifies re-birth is made clear by the rite of initiation into a new rank or status, for instance, that of a king or god. In

⁵ E. A. Wallis Budge, *From Fetish to God in Ancient Egypt*, 1934, p. 494. In a note (N. 1) Budge says that later Mesquet was the Underworld generally.

⁶ A. Moret, Hastings' *Encycl. of Religion and Ethics*, ix, p. 75f.

⁷ Mrs. Sinclair Stevenson, *The Rites of the Twice-born*, 1920, pp. 33, 40, 93, 104, 215.

the coronation ritual, the *Satapatha Brahmana* tells us that the officiating priest invests the king with a garment known as 'the inner caul of sovereignty.' Afterwards he invests him with 'the outer caul of sovereignty.' Finally he throws over him a mantle which he addresses as 'the womb of sovereignty.'⁸

In much the same way in ancient India a Brahman was raised to the rank of a god. "He feigned to be an embryo and as such was shut up in a special hut representing the womb. Under his robe he wore a belt, and over it the skin of a black antelope; the belt stood for the navel string, and the robe and the black antelope skin typified the inner and outer membranes (the amnion and chorion) in which an embryo is wrapped."⁹

It may be that the sacredness ascribed to black is due to its recalling the black shiny stuff of the outer membrane of the embryo. In any case, to speak of skins again, it was found that in Lepers' Island the natives ascribed the origin of death to the loss of the power of changing the skin.¹⁰

⁸ A. M. Hocart, *Kingship*, 1927, p. 77.

⁹ Sir J. G. Frazer, *Folk-lore in the Old Testament*, ii, 1918, p. 32.

¹⁰ R. H. Codrington, *The Melanesians*, 1891, p. 283.

SOME EXPERIMENTS ON THE ORIGIN OF EARLY COPPER. *Extract from a Communication to the Royal Anthropological Institute by Mr. H. H. Coghlan, A.M.I.M.E., F.R.S.A. (Ireland), 8 November, 1938. Cf. MAN, 1938, 219.*

92 The discovery of how to obtain metallic copper by means of the process of smelting from ores must have been an event of the greatest importance to prehistoric man and, although much has been written on this subject, it seemed to the writer that there was some confusion of thought about how the accidental discovery of copper smelting was first made, also that there was a need for some experimental work to support theory.

As there seemed to be some difference of ideas on the important question of whether it was practicable to smelt copper in a primitive 'Hole in the Ground' or camp fire, the following experiments were carried out, primitive conditions being simulated as far as possible. The ore selected for the experiments was the green carbonate malachite. This ore would seem to be the material most probably used for the production

of the earliest smelted copper, the copper smelted from malachite being often of a very high purity. It is also probable that for many centuries only the oxidized surface ores, such as malachite, were used.

A small hole about one foot in diameter was made in the ground, the hole was well dried out by means of a wood fire and then a hot charcoal fire was started. A ring of stone was made round the hole and concentric with it, the inside diameter of the stone ring being about three feet. A cone of charcoal was then built up and the ore was well embedded in the centre of the cone. Small pieces of malachite were placed in two layers in the cone, each layer being separated from the other by charcoal. A day when there was a strong wind blowing was chosen for the experiment and after an hour the fire reached a bright red heat. It could

certainly not have attained greater temperature without the aid of a forced draught created by the use of a bellows. The fire was supplied with fresh fuel and kept at full heat for some hours and was then allowed to burn down slowly. When the fire had been carefully cleared out, it was found that the malachite had only been reduced to the black oxide of copper; no metallic copper had been produced. The conversion of malachite to black copper oxide takes place very readily at comparatively low temperatures, usually about 140°C . In contact with hot carbon the black oxide of copper would be reduced to metallic copper at a temperature of about 700° to 800°C .

As a check the experiment was carried out several times, using various sizes of hearth. Cuprite, the red oxide of copper, was also experimented with, but this material gave an equally negative result. It was not considered necessary to experiment with any of the sulphide ores; they occur at a greater depth than the oxidized ores; also they are decidedly more difficult to reduce and so they are unlikely to have been the first ores to have been utilized by prehistoric man.

The failure of these experiments to obtain metallic copper from the ore seemed to be clearly due to the fact that in spite of careful surrounding and packing of the ore in the fire, an excess of air was present so that the necessary reducing atmosphere was not obtained. Later experiments proved that low temperature was not the cause of the failure.

The theory is not put forward that, if forced draught be used, it is impossible to smelt copper in a small 'Hole in the Ground' furnace, but that such furnaces must have been used by a people with a sophisticated copper-smelting technique, and that the original discovery of copper-smelting was not made in such a way.

Since the failure of the experiments indicated that the camp fire or 'Hole in the Ground' fire was very unlikely to have been the first metallurgical hearth, the only suitable remaining source of heat would seem to have been the pottery kiln or furnace. As the use of pottery certainly predated the discovery of smelted copper by a considerable time, it is quite possible that the closed furnace, or possibly even some form of reverberatory furnace, may have been in use. There seems little doubt that the first

pottery was baked in a mixed heap of pots and fuel on the ground. Afterwards the separation of the pots and the fuel would have been evolved, and finally large and well-designed furnaces with draught flues and separate baking chambers would have been developed.

If a copper carbonate ore such as malachite was introduced into a pottery kiln, the thermal conditions would be favourable for the reduction of the ore to take place and, to test this, the following simple experiment was carried out.

The idea was to endeavour to get the conditions which would have obtained in an early kiln such as the well-known kilns at Erosd in the Alt Valley, where the baking chamber is simply a dome of brick or burnt clay with the fire underneath and surrounding the dome. This construction was represented in the experiment by an ordinary pot of red ware inverted over a flat pottery dish on which a small lump of malachite was placed. This miniature kiln was put on a bed of hot charcoal and ashes, then a cone of burning charcoal was built up all round it until it completely covered the kiln. The fire was kept at a good red heat for several hours; no artificial draught of any kind was used. Metallic copper was produced, not in a compact mass, but rather as a sponge-copper. Dr. C. H. Desch kindly examined the copper and reported as follows:—

"Your specimens show that you had very good reduction of the malachite to copper. The copper is in the form of well-shaped crystals and there is no doubt that the temperature was high enough, but it was not able to run together to form a compact mass. This is probably merely a matter of the packing of the material. The furnace must really have been quite hot as a good deal of copper has been volatilized and has penetrated into the clay mass. Probably it took the ancient metallurgist a long time to learn how to pack the materials correctly, and I think that on the whole your experiment is to be regarded as a success."

In order to see what effect it would have to pack the material as suggested by Dr. Desch, a further experiment was made using malachite ground to a small size; this gave the satisfactory result of producing a compact and close-grained bead of copper which could have been forged into any shape required.

The conclusion to be drawn from these experi-

ments would seem to be that if a piece of malachite, or ground malachite, was accidentally left in the baking chamber of a divided, or reverberatory, pottery kiln, it would become reduced, and, since the baking chamber would not contain any fuel, the resulting copper would be easily noticed.

The question whether malachite could have got into a pottery kiln of course depends on whether malachite was ever used for the decoration or painting of early pottery. There are probably two ways in which malachite may have been used in connexion with pottery.

(1) The malachite may have been made up with a flux to resist the tendency to powder off. Applied to the pottery in this way as a slip, or even painted on, the result would be a smooth black decoration. The writer made some tests in this manner and with reducing conditions in the kiln and using ground malachite made up as a paste and painted directly on to a red ware, he obtained a fine black surface.

(2) The malachite may have been made up with a glaze. Analyses of Egyptian blue frit show that it is coloured by a copper compound. Hence it would seem possible to associate copper, and most likely malachite, with glazes as early as the 1st Dynasty in Egypt, and, if the art was intrusive into Egypt, the origin of the practice would have been still earlier.

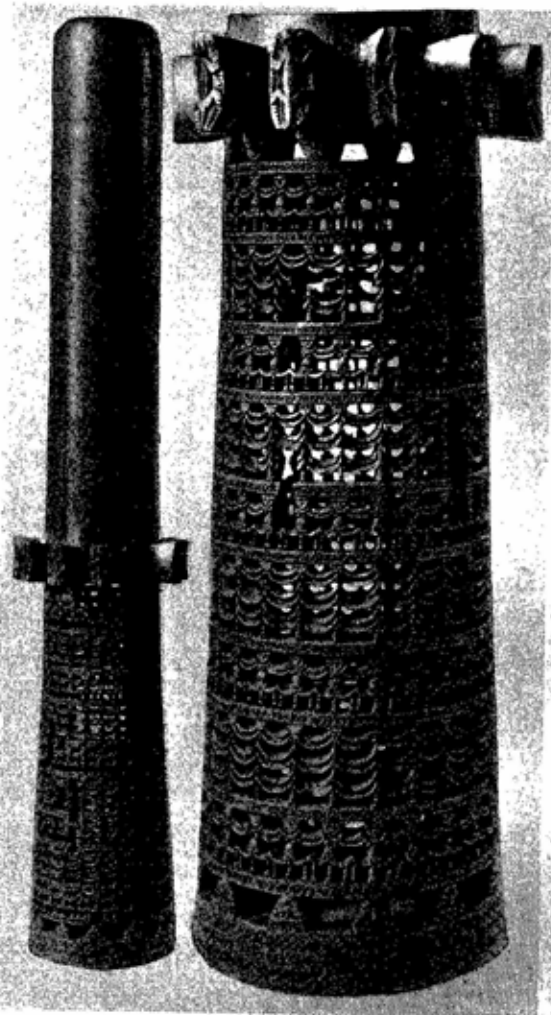
To sum up, it seems to the writer that, for the following reasons, the accidental reduction of a piece of copper ore, most likely the ore malachite, which led to the discovery of the knowledge of how to smelt copper from its ores, was made in a pottery kiln:

Firstly, the technical conditions and furnace construction would be suitable for producing the necessary reducing atmosphere. There is also evidence to prove that various early wares were painted or decorated in a reducing atmosphere. The experimental results also show that copper is easily smelted under pottery kiln conditions.

Secondly, the writer has not been able to secure evidence of any primitive copper which is known to have been smelted in a small open fire such as a camp fire, without artificial draught, and the experimental results indicate that it would be most difficult to make an accidental discovery of copper-smelting under such conditions.

A CARVED DRUM FROM RAIIVAVEE (HIGH ISLAND). *By T. Sheppard. Municipal Museums, Hull. Illustrated.*

93 Among the many objects which the Hull Corporation took over from the Hull Literary and Philosophical Society in 1900, was



CARVED DRUM FROM RAIIVAVEE (HIGH ISLAND).

a large object described in the old catalogues as "Otaheitan Drum, carved out of a solid piece of wood." It is 4 ft. 3½ in. in height; 6 in. across the top and 8 in. across the bottom.

This was recently examined by Mr. H. D. Skinner, of Otago, New Zealand, who considered it was from Tubuai, and that it was for ceremonial purposes. Round the bottom half are carvings composed wholly of female figures.

On submitting the photograph of this to Mr. Peter H. Buck, of the Bernice P. Bishop Museum, Honolulu, Hawaii, he writes:—

"The drum is not from Tubuai but from Raivavee, or High Island, which lies farther to the east. We have photographs of eight other drums from this island, which resemble your drum in having alternate transverse panels of carved female figures and curves. Your drum, however, is quite unique in that

"the projecting knobs are neatly carved with a lizard motif. This is the first artifact from the Australs that I have seen carved with the lizard motif, and I therefore regard it as a type specimen. I was indeed fortunate in writing to you and I again thank you for making available to us such a fine specimen for future comparative study."

The photograph reproduced herewith shows the drum itself, and details of the carving in the lower half.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

The Javanese Wayang and its Indian Prototype.

94 Summary of a Communication by Dr. H. Meinhard, 9 May, 1939.

After giving a description of the *Wayang purwa*, the Javanese shadow-play, and a review of opinions as to its original character and provenance, the paper dealt with the ancient Indian shadow-theatre, the *Chāyānāṭaka*, and ended by communicating some recently found evidence of its continued existence down to the present time.

The antiquity of the *Wayang*, its intimate connexion with Javanese social life, its deep religious stamp, the genuine Javanism of the technical terms, have been brought forward by Brandes and Hazeu, in favour of a hypothesis that in spite of its Indian contents it is an autochthonous Javanese phenomenon, that has only been Hinduized in the course of its history. This opinion, based partly on the alleged lack of evidence of an ancient Indian shadow-theatre, became untenable when Jacob and Pischel proved the Sanskrit *Chāyānāṭaka* to have been a play performed with leather puppets. In Sanskrit literature, shadow-dramas existed at least since the thirteenth century A.D. Popular shows of leather figures—Pali *cammarūpa*—were known, as Coomaraswamy has pointed out, in southern India and Ceylon in the twelfth century. But they appear to have been known long before that time, and, as Pischel and Lüders have shown, it is almost certain that the shadow-play is alluded to in passages dating as early as the second century B.C. In fact, it seems to have been one of the main roots from which, much later, the classical Indian drama sprang. Still, though a few important points of resemblance have been ascertained, our whole knowledge of the ancient Indian shadow-theatre is too scanty to allow of a thorough comparison with the Javanese *Wayang*.

At most scholars tend to regard the once popular Indian shadow-play as practically extinct. However, its survival has already been established in the *Bombay Gazetteer* and, later, in R. E. Enthoven's *Tribes and Castes of Bombay* and, lastly and most fully, in L. K. Ananthakrishna Iyer's *Mysore Tribes*

and *Castes*. The reason why its existence did not obtain the attention it deserved, appears to be that those who knew about it were quite unaware of its historical relations. The first observer who connected the modern shadow-play with the ancient *Chāyānāṭaka* and the *Wayang* seems to have been a German orientalist, Dr. Spies, who chanced to witness a performance in Bangalore in 1935. Meanwhile, a small number of painted transparent leather puppets representing figures of the *Mahābhārata* and *Rāmāyana* have found their way into at least two ethnographical collections, viz., the India Museum, South Kensington, and the German Leather Museum at Offenbach-on-Main.

The area where these performances appear to be relatively best preserved is the Kanarese-speaking southern Deccan. They are executed before village audiences by itinerant showmen who move about within definite borders, and who, during the rains, live outside the villages in mat-covered reed huts. These people are immigrants from the Marāṭha country, and though all speak Kanarese, and some also Telugu, their home-tongue has remained Marāṭhi. The name by which they are most commonly known in Mysore is said to be *Killekyāta* or *Killikiater*, *Killiketar*, *Kiliket* respectively in the adjoining Bombay districts where they are also locally called *Katabu* or *Katbu*. They style themselves *Chatri* in consequence of their claim of descent from a Kshatriya who is believed to have followed the Pāṇḍava brothers of the *Mahābhārata*. The caste contains two main occupational subdivisions, viz., the Minahidiyu, or Burude Besta, river fishermen, and the Gombeyādisu, or Bombey-āṭadavaru, picture-showmen. *Gombe*, as well as *bombe*, means in Kanarese 'image,' 'figure,' or 'puppet.' The shadow-play is known in Mysore as *cakkaladagombe*, from *cakkaḷa*, 'leather,' while the exhibitions of wooden marionettes are called *sūtradagombe*, from *sūtra*, 'string.'

The *Killekyātas* have got their name from one of the figures of their show-box, called *Killekyāta*, which is said to mean a mischievous imp. It is described as being of fantastic appearance, jet-black

in colour, with tilted nose, dishevelled hair, flowing beard, protruding lips, pot-belly and crooked hands and legs. Dr. Spies remarks that it has a huge phallus. After an initial prayer to Ganapati and Sarasvatī, Killekyāta is made to appear behind the lighted screen in the company of his equally hideous wife Bangarakka, to amuse the audience with obscene jokes.

The picture-exhibiting subdivision of the Killekyātas is again subdivided into two sections, viz., the major and the minor showmen, Dodḍa and Cikka Bombayāḍavaru. It seems to be the minor section that chiefly excels in the ruder sort of show. The *Dharwar Gazetteer* speaks of "leather dolls of various shapes, all naked and indecent." Their motions and the explanations given are said to cause much laughter among the spectators, but to be so indecent that Government have forbidden the performance in public places. The stage is described as very primitive, the showman alone sitting inside and moving the puppets, while a woman sitting outside produces a monotonous music with a friction instrument. Or a second man and a woman sit outside, the former explaining, the latter beating a drum. The major showmen, on the other hand, use a raised stage spacious enough to accommodate the whole troupe which is equipped with a more elaborate orchestra. Another account speaks of a tent of black cloth which is closed, on its front side, with the linen screen. The figures are said to be made of several pieces cut separately out of goat-skin, or deer-skin, or buffalo-hide, and joined together with wires, so that various postures and motions can be produced. The plays are of a higher type, based on recognised books on the Mahābhārata and Rāmāyana, and the players, including the women, are said to be all literate. From time to time the performance is enlivened by the appearance of the two buffoons, Killekyāta and his wife. The show begins at about 10 p.m. and goes on till shortly before daybreak. When it is over, the members of the troupe collect presents in kind at every house in the village, in addition to a lump sum raised by the whole village.

Some points mentioned in the accounts of the Killekyātas may be of some importance as to the comparison of the Indian with the Javanese play. Emphasis is laid upon the ancestor worship prevalent in this caste. The Killekyātas worship their leather figures on Ganesha's festival in August-September; according to another account they worship their box of pictures daily. A belief in an exorcising power imminent in the leather figures appears in their practice of making a person possessed by an evil spirit to sleep near the show-box for three or four nights, which is believed to scare the spirit away. There is a notion that it is auspicious for rains and crops to have the shows performed about the harvest time, and in some places the Killekyātas are entitled to customary annual fees. The various agricultural implements are believed to be the limbs of the demon Karebhanta, or Killekyāta, rude charcoal drawings of

whom are made on each corner of a field under crop. The brother of this demon, Jokumara, is believed to die annually and to go to the god of rain imploring him to save people from famine.

It may be worth while, in this connexion, to reconsider the meaning and position of Semar, the phallic buffoon of the Javanese Wayang. Semar has been regarded as an original vegetation demon, a relic of the genuine Javanese, or pre-Hindu, mythology. The etymology of his name, which has been connected with old Javanese *sumār*=Sanskrit *sphuta*, 'burst,' 'opened,' 'ex-panded,' 'blossomed,' has been said to point into the same direction. However, granting this etymology to be true, it would not necessarily stamp Semar as an autochthonous Javanese figure. It is quite conceivable that he is an import from India like the rest of the Wayang caste, being nothing else but the Javanese counterpart of the phallic Killekyāta or his prototype in the old Indian shadow-play.

There is another caste with a similar occupation in the Marāṭha parts of the Deccan. The *Bijapur* parts of the Deccan. The *Bijapur Gazetteer* remarks that the character of the Kilikets' shows closely resembles that of the Citrakathīs or picture-showers of the north Konkan and Deccan. *Citrakathī* means 'one who explains pictures.' These people are a small Marāṭhi-speaking caste of wandering beggars, represented in several Bombay districts, but apparently stronger in Berār. When settled, they live in wattled huts thatched with grass, and when travelling, in small tents or *pals*. Several peculiarities of their caste organization and customs point to their original connexion with the Killekyātes of the Kanarese parts. Except, however, for the above, and perhaps misleading, remark in the *Bijapur Gazetteer*, unfortunately in none of the publications dealing with them is it made clear what their shows are really like. Neither cut-out leather figures, nor performances by night, nor dramatic dialogues are mentioned. One account says that "they go about carrying a few coloured pictures of their gods rolled up and slung on their backs." They offer to tell the exploits of Rām and other "incarnations of Vishnu. If the people agree, the showman opens his book and shows them the pictures; singing and describing." This recalls the Mankhas, a class of wandering beggars mentioned in Sanskrit literature, who used to move about with pictures in their hands, or the Yamapatikas, another branch of the same calling, who unfolded, and explained with songs, so-called Yamapatas or scrolls of cloth or canvas showing pictures of Yama with his attendants and the punishments of hell. It also recalls the Javanese *Wayang beber*, exhibitions of scroll paintings with spoken text which appear to be connected with the above old-Indian performances, though they do not treat such macabre subjects as the Yamapata shows. In certain parts the Citrakathīs are said to have a caste rule that everyone must have in his house a complete set of pictures, including forty pictures of Rāma, forty of Sītā and Rāvaṇa, forty of the five Pāṇḍava brothers,

etc. They also used to show wooden dolls representing the heroes and demons of the epics, performances which have, however, passed into desuetude.

Whether the shows of the Citrakathis are exhibitions of cut-out pictures or of fixed paintings on paper or some other material, and whether the text is dramatic dialogue or epic recital, both sorts of entertainment have apparently sprung from the same root. In the Siamese shadow play, *Nang*, with its immovable leather pictures representing complete scenes and with its accompanying epic narrative, we have an artistic variety intermediate between both possibilities.

In the past, shadow-shows as well as exhibitions of scroll-pictures must have been known also in other parts of India where they do not seem to exist at present. It was probably from the Tamil coast, and probably at a very early time, that the Indian prototypes of the *Wayang purwa* and the *Wayang beber* found their way to Java.

In comparison with the volume of literature on the Javanese *Wayang*, next to nothing is so far known of the Indian shadow-play and cognate artistic forms. That they have found so little attention is, of course, due to their very humble role in Indian culture, while the *Wayang* is a very prominent phenomenon in Java. A closer investigation of the Indian shadow and similar plays, of all the customs, rites and beliefs connected with them, together with a publication of play-texts, would probably yield, among other results, a new light on the Javanese *Wayang*.

Committee on Applied Anthropology. Report of 95 Discussion: "Some Problems of Education in East Africa," 12th February, 1939.

Mr. H. S. Scott introduced the discussion by pointing out that education in the broadest sense included political and economic education as well. Though anthropological research has been drawn upon for the purpose of political administration in Africa (e.g., in establishing Indirect Rule) too few investigations have been made of education in primitive societies to enable educationists to apply anthropology in their strict sphere. It has not been sufficiently emphasized that primitive education is carried on without the aid of writing and principally through the medium of spoken language.

Probably less than 12 per cent. of African children are to-day receiving some sort of schooling, the vast majority in schools controlled by Christian missions. The policy of the Colonial Office leaves room for criticism in this connexion, both from the administrative point of view and as regards the aims and principles postulated. It is difficult to attach any concrete meaning to such shibboleths as: The aim of education is to improve what is sound in indigenous tradition, or to strengthen the feeling of responsibility to the community. It would be most honest to admit that contact with civilization and especially Western forms of education, inevitably weaken tribal authority and indigenous religious sanctions. Education, and especially Christian

education, must be disruptive. There is a complete antithesis between Christian values and traditional native values, and it is mere rhetoric to talk about 'using what is best in native belief.' These facts have to be faced, and the price of westernisation paid. All these problems would be illuminated by anthropological research. It would be of help in more specific matters as well. Thus, the tragic mismanagement of the circumcision question among the Kikuyu might have been mitigated, if the aid of anthropologists had been called in.

Committee on Applied Anthropology: Report of 96 Discussion: "Native Peasant Economy and Production for the International Market," 12th May, 1939.

Introducing the discussion, Dr. C. Leubuscher classified the general problems facing peasant producers as follows: (a) Those due to the need to ensure a steady supply of produce of satisfactory and uniform quality for the world market; (b) The problems of marketing organization; (c) The problem of protecting the peasant economy from the effects of uncontrollable economic influences. In countries like Africa peasant producers are less able to solve such problems for themselves than elsewhere. Their dependence on Government assistance is greater. The effects of Government intervention are greater, however, than in a more advanced and diversified economy, with a more elaborate division of labour.

Elsewhere the main organization for dealing with these problems has been the co-operative society; but this also needs Government supervision in a continent like Africa, where it functions more as a thrift and credit association than as a selling agency. Native administrations cannot yet undertake the control of quality and quantity of produce or run a selling organization. But Government intervention should not be of such a nature as to prevent a natural economic development, e.g., by obstructing the growth of a native merchant class or of genuine native co-operatives. A monopolistic selling organization may be the most rational from the economic point of view; it may have serious drawbacks from the point of view of native sociology and psychology.

In some respects Government control can be especially helpful, e.g., in preventing by law the growth of peasant indebtedness. This will not be so easy when a genuine demand for credit arises. It will be necessary to encourage thrift and mutual aid societies. Production for the external market reacts on the internal economy and on the institutions connected therewith. Though it raises the standard of living of the peasant society, it introduces factors of great instability due to fluctuations of demand, the trade cycle, etc. To counteract these effects the production of food crops for the domestic market and the diversification of the internal economy must be encouraged lest the native economy come to be based entirely on production for export. The encouragement of thrift among native growers will also help in this connexion.

OBITUARY.

Frank Hulme Melland: 1879—3 February, 1939.

97 The sudden death of Frank Melland has come as a great shock to all who knew him and had followed his career, and his work on behalf of Africans. He was unfortunately killed when attempting to board a train in a fog at South Croydon on 3 February.

He was born at Heaton Mersey in September, 1879, and was therefore 59 at the time of his death. Educated at Shrewsbury (Mr. Chance's house), in 1897 he went on to Merton College, Oxford, where he gained 2nd Class Honours in Modern History. He was also in the College boat.

In 1901 he went to Northern Rhodesia as an administrative officer in the service of the South African Chartered Company and served there until 1927. In 1914 he married Evelyn Scroggs, daughter of Commander Scroggs, R.N. There are four children.

In 1910 he and the late E. H. Cholmely made an adventurous journey on bicycles Northwards from N.E. Rhodesia through what was then German East Africa, on through Uganda and so down the Nile. This journey, remarkable at the time, resulted in a joint book in 1911 called *Through the Heart of Africa*. In 1923 he published *Witch Bound Africa* (Seeley Service); in 1937 with Mr. Cullen Young, *African Dilemma* and in 1938 *Elephants in Africa* (Country Life). In addition he contributed many articles to reviews and magazines and his talks for the B.B.C. will be remembered.

For a time he represented Northern Rhodesia at the Office of the East African Dependencies in London, but in the depression of 1931 the Colony retrenched this post.

Few officers who have worked in Africa can have dedicated themselves to its service as Melland did. His understanding sympathy with the African stood out above all else; without giving way to sloppy sentiment, he beyond doubt had the gift of 'getting under their skin.' His Africans knew it too, and this inspired great devotion on their part. His ideal of service to Africa and to its people is clear in all his works.

It may be remembered that some twenty years ago in Northern Rhodesia a curious individual named Mwana Lesa came into prominence for an infamous series of murders. He was a leader of the so-called 'Watch Tower' movement and although on one hand preaching salvation, he commenced a campaign against witch doctors and upon the flimsiest of grounds drowned a number of men. Having started this career his blood-lust seemed to grow and he continued to drown people indiscriminately until the whole region was in a state of terror. Being arrested eventually, he was tried for murder, and Melland, being well known for his knowledge of native ways, was appointed to defend him. The conscientious way in which he undertook this difficult task excited the admiration of many. Mwana Lesa was, however, found guilty and hanged.

During recent years Melland wrote much on the subject of native witchcraft, pleading earnestly for

some differentiation in the legal treatment of those who practise the relief of persons who are, or believe they are, under the ban of maleficent spells, and those who impose such spells with the desire to injure or kill. His plea was that the help of those who practise cures should be enlisted against those whose designs are evil. The question is in practice, however, one presenting great difficulty and so far a workable solution has not been found.

He was recently appointed Secretary of the Royal African Society, a body in which he had long been interested, and during the few months he filled this post he demonstrated the flair he had for the work and the excellent pamphlet just published by the Society, and containing a series of reviews of Lord Hailey's great *Survey of Africa* is due to his initiative. He will be difficult to replace.

Melland was deeply respected at Caterham, where he had settled and, although an indefatigable worker, always seemed to find time to participate in good works for the people among whom he lived. The deepest sympathy is expressed to his widow and the family he has left behind.

C. W. H.

Leonard Halford Dudley Buxton. 1890—5 March, 1939.

98 Son of a well-known London doctor, and educated at Radley and Exeter College, Oxford, Leonard Buxton combined many interests and accomplishments with a taste for administration and a genial temperament, which won him friends everywhere, though his purely scientific work suffered from multiplicity of engagements. After winning distinction in the Diploma in Anthropology, he left Oxford for the Wellcome expedition to the Sudan, and in 1913 took part in excavations in Cyprus. From 1914 to 1918 he served in France with the Cameron Highlanders, and later in the Intelligence Service. His Albert Kahn Travelling Fellowship gave him an exceptional opportunity of acquaintance with China, and inspired his books on *The Eastern Road* and *Primitive Labour*, 1924. He was already demonstrator in Physical Anthropology at Oxford, under Arthur Thomson, and did much useful work in the Diploma Committee and field work on early cemeteries in the neighbourhood. In 1929-30 he was Proctor, and found his place in University business as Curator of the Schools and of the Parks, for he was a good botanist and keen gardener. With the Keeper of the Archives, Mr. Strickland Gibson, he compiled a well-known handbook to *Oxford University Ceremonies*. In 1933 he became Fellow and Bursar of Exeter College, and he served on the City Council till his death after a few days' illness, within a few hours of the death of his wife. His unusual combination of classical, mathematical, scientific and technical knowledge, and his insistence on statistical methods, which interested him greatly, made him a valuable member of the anthropological school at Oxford, where he will not be easily replaced.

J. L. M.

REVIEWS.

AFRICA.

Africa Emergent. By W. M. Macmillan. London, 1938. 414 pp., 4 maps. Price 15s.

99 Mr. Macmillan is well known to students of African affairs. What he writes is written for those who are ready to do a considerable amount of thinking for themselves. In the 400 pages of this very closely-packed study he never relaxes in order to make things easy for such as are not able to move at his pace and upon his level. But, at that pace and upon that level, the reader finds himself travelling more easily as he proceeds. This is partly due to a gift which the author possesses of re-invigorating his fellow-traveller from time to time. He does this in his writing just as he does it in speech or debate; by the constant play of a wit which proves even more of a stimulant than a smile-producer and—where necessary—by shafts of irony, none the less effective because it seems at first sight so gentle. It need hardly be said that neither wit nor irony is ever used cheaply.

The range of African experience which Mr. Macmillan has had since the cloistered days of a South African professorship justifies the very wide sweep taken here; though in one respect that experience falls short of completeness. He has never had any long-term intimacy with village life; the kind of intimacy that permits growing interchange of thought through language mutually understood, and the *entrée* into the social and domestic circle of a people whose barriers of reserve have, through long acquaintance, been removed. It was, therefore, with particular interest that one turned to his section on 'African Society.' This is the central section of Part I, in which a general view of the African background—'backward Africa'—is provided.

The whole of Part I, with its sections on 'The Mission of Civilization,' 'The Roots of Backwardness,' 'African Society,' 'The Land,' is of fundamental importance since Africa's backwardness—resulting from 'the forces of physical nature'—gives rise to every one of the difficulties which face all who have anything to do with the continent. 'It is part of my theme that positive doings in Africa have at almost every point been determined largely by force of difficult, imperfectly understood conditions and circumstances.' The reader soon discovers that the African is going to receive an exceedingly comprehending treatment, though the lack of long-term intimacy at the hearth and in the home will show itself here and there. It must be said, however, that this happens (in the main) with reference to relatively minor matters. The general picture is not misleading and is very sensitive to real values.

Such a statement as 'In Africa slavery was indigenous,' (p. 49) ought not to have been made. In speaking of the high value placed upon children it shows less than full comprehension to say (p. 51) that they were valued 'for work and defence.' This is entirely to overlook the spiritual necessity of having children, since without family on this earth there could be no continuance of existence in the 'upper house.' As St. Paul would say, 'We without them cannot be made perfect.'

Again, when referring (p. 81) to what is described as the 'pawning of children,' the ignorant reader is left with the bare picture of our pawnshop technique to guide him. No attempt at all is made to describe the vital distinction between *slave* and *serf* in Africa; a distinction supremely vital because Africa provides the only case, so far as one knows, of social distinctions based on justice and void of rancour. Finally, the effect (pp. 82-83) of ferocious condensation in Mr. Macmillan's

remarks on Marriage is to lead him into confused and misleading statements, where not only is the distinction between the matri- and patrilocal forms not clearly maintained, but no indication whatever is given that, in Africa, the observer looks down into an arena where at this moment (but in widely separated sectors) the great domestic drama of the ages is being played out; the evolution of human marriage from the dominance of the mother-group to that of the father.

But from the point of view of the book's main theme, these may be minor matters. They are mentioned here as illustration of the handicap under which anyone must move who has not had long-term intimacy with 'the primitive situation.' There are, no doubt, those who in Mr. Macmillan's view tend to idealize that primitive situation, but it would be indeed unfortunate if emergent Africa could not count at least upon some who are able, with some intimacy, to attempt its interpretation.

I would place the District Officer as the one to whom this book will be most welcome. In it he comes, at last, to his own. Those of us who have known him and watched him at his patient task know well that it is upon him, rather than those in higher authority, that the process of serving Africa does most surely depend. With him in this book there stands also the missionary, as indeed they so often stand together nowadays all over the land. Mr. Macmillan's crucial question as to how far (if at all) these two may be allowed to believe that colonial policy still permits them to talk in terms of 'service' to Africa, is addressed to other quarters. May the time not be long delayed when preoccupation with anxieties nearer our shores will slacken, and permit this question to be faced.

Within the present book, and for the purposes of that crucial question, I would particularly recommend study of the sections dealing with the policy of Segregation, with Population, with the Land, and with Native Administration; including, of course, what is said, very wisely, on Indirect Rule. None will appreciate Mr. Macmillan's criticism and appraisals more, perhaps, than the members of the administrative service in Nyasaland.

I regret that the moment of publication has meant that no reference has been possible to one very enlightening contribution from a native African in a book that has just preceded Mr. Macmillan's; a contribution which would have been invaluable here when dealing with the Land as the basis of social and economic life. I refer to Mr. Kenyatta's approach to that subject as something which in the mind of his people has the value of a 'maternal relationship.' The significance of that in a land whose universal expression in times of stress is 'Oh, my Mother!' will not escape notice.

I regret also, in a volume that is splendidly indexed and documented most thoroughly throughout, the absence of specific reference to writers from whom quotation is made without name or source. It was, for instance, amazing to find the name of Dr. E. W. Smith entirely absent. But, such things notwithstanding, it is no exaggeration to say that this crowning work of Mr. Macmillan's is the most widely useful survey of the African situation at present available. CULLEN YOUNG.

African Women: A Study of the Ibo of Nigeria.

100 By Sylvia Leith-Ross, Leverhulme Research Fellow. With a foreword by Lord Lugard, G.C.M.G., C.B., D.S.O. London, Faber & Faber, 1939. Demy 8vo. 367 pp.: 8 illustrations, 2 maps. Price 15s.

The women of Iboland are not as other African women.

They do pretty much as they please; and when they feel like it they do it all together. During the economic depression of 1929 they conceived a violent hatred of the Government and of their own chiefs, and acting like one man, or one woman, they made hay of the whole system of law and order. It is obvious therefore, as Mrs. Leith-Ross says, that their friendly co-operation in the future will be as necessary as their enmity would be disastrous. And, be it remembered, the Ibo are no insignificant people. They are the largest, or second largest, tribe in Africa, and wisely, or unwisely, have plumped solidly for as much European culture as they can get.

Mrs. Leith-Ross undertook this study as a Leverhulme Research Fellow. She was well qualified for her task by a long acquaintance with the peoples of Nigeria. But she had no previous experience of the Ibo themselves, and as the time at her disposal was insufficient for acquiring a knowledge of the very difficult Ibo language she was obliged to work through interpreters. Yet in spite of these drawbacks, and the difficulty also of carrying out investigations among a people who were still disgruntled, she succeeded in collecting a great deal of valuable information, which is here presented in an extremely attractive form.

The book is a study in culture contact, and the method of study was to select groups at typical stages of Europeanization, beginning with one living under comparatively primitive conditions, then proceeding to one which had more frequent contacts with the outer world (in the form of missions, teachers, middlemen, motor lorries and so on), then to a semi-urban community which was also a Government centre, and finally to a large coast town (Port-Harcourt) which had no traditional background of native life and indeed owes its existence solely to the new conditions. The distinctions between the first three groups are not, perhaps, to be pressed, since there is scarcely a village in the whole of Iboland which cannot now boast a church or school. In the most remote villages European cotton goods have displaced the native cloth woven of raffia, and all over Iboland the European trade in palm-oil has become the dominant economic factor. It provides the people with the means to pay their tax and to buy the clothes or other European articles which have become necessary to their new manner of living.

Having been herself a member of the Education Department, Mrs. Leith-Ross speaks with authority on education. She observes that one of the effects of our system of education is that the Ibo correspond with one another in English and not in Ibo, and that boys and girls even write their love letters in English (p. 58). Education is regarded primarily as a means of obtaining employment, and so everyone insists on learning English. She considers the indiscriminating demand for schools, good or bad, and often conducted by incompetent, lazy, self-satisfied teachers, as a serious danger (p. 132). Moreover, parents spend so much money on education that there is often nothing left to provide bride-prices. At the same time higher bride-prices are expected for girls who have received a good education. Yet many Ibo men prefer uneducated wives, because they are more efficient and less expensive. Among the Ibo the women are bread-winners no less than the men, and a system of education which teaches them merely to be fine young ladies leaves them and their husbands stranded (p. 267). It is refreshing to hear (p. 133) that children who go to school do not appear to be less respectful towards their parents. On the other hand it is pointed out (p. 227) that one of the means by which heads of families maintain their authority is through the belief that quarrelling offends the 'medicines' which are kept in the house. Thus, when the household becomes Christian, this means of maintaining order is destroyed.

On the subject of missions Mrs. Leith-Ross is very outspoken and declares (p. 170) that "conversion is the easily accepted condition on which a child can attain to the school which will give him the learning which will give him the job." But this does not explain such facts as that, when news goes round that a Father is coming to say Mass, the Church is packed with people who had left their homes long before daylight (p. 169). The mass movement towards Christianity has, of course, raised many difficult problems which are fully and fairly discussed by Mrs. Leith-Ross. The question of polygamy versus monogamy has led to the formation of a native Christian sect which allows polygamy. One of the main arguments brought against monogamy is that to an Ibo a childless marriage is no marriage at all. Of a barren wife it is said that "she is no more than a piece of furniture." Or the husband's relatives may say to him "Your wife eats and sleeps, and sleeps and eats—is it for this that we have paid a bride-price?" (p. 270).

In Port-Harcourt we see a complete breakdown of the traditional forms of native life. The basic social unit, the extended family, with its network of interdependent relationships, is not found at Port-Harcourt. There, too, women are bereft of one of their main interests in life—the farm. The more educated men have forgotten any native dances they ever knew and attend 'balls' run on European lines. There is a cinema owned by Africans, and on Sunday bells clang out from the churches of fourteen different Christian sects. Not a very pleasant picture! Yet it is admitted that most of the inhabitants of Port-Harcourt regard themselves merely as birds of passage. Many interesting details are given about the economic life—how European firms consult the women traders about the patterns received from England, or how two women, one living in some inland town and the other at Port-Harcourt, carry on a trading partnership, the former sending yams and the latter fish and bales of cloth. Mrs. Leith-Ross, incidentally, formed the opinion that Ibo women were more capable of co-operation than men and had a more cosmopolitan outlook, due partly to the system of exogamy which gives women experience of life in more than one community, and partly to the marketing system which brings together women of countless different communities three or four times every week.

It will be seen that Mrs. Leith-Ross's book touches a great variety of subjects. It is a stimulating study which can be commended to all who are interested in the new Africa. If it appears to be somewhat subjective, this is due, in the main, to the nature of the subject. No errors or misprints were observed, except that Nigeria is described as a 'Crown Colony'. There are some delightful photographs.

C. K. MEEK.

A Handbook of Tswana Law and Custom. Compiled for the Bechuanaland Protectorate Administration by I. Schapera. Published for the International Institute of African Languages and Cultures by the Oxford University Press, 1938. xiv + 326 pp., 1 map. Price 21s.

Professor Schapera has compiled this handbook at the request of the Bechuanaland Protectorate Administration; and the Tswana themselves requested that some such record of their law should be made. The book will undoubtedly satisfy those for whom it has primarily been written, the British and Tswana administrators: it will also be of great value to social anthropologists.

Chapter I gives a clear and concise description of the social structure of the Tswana tribes, defining the nature and functions of the political, territorial, kinship, age and class groups, and indicating their coincidence, divergence and interdependence. This is fundamental to

any account of law, since legal rules always involve the relationship of persons, even in relation to a thing. This description is the background to both the administration of law and the legal rules.

Chapter II deals with the nature and sources of Tswana law. There are many sanctions to enforce the observance, and to punish breaches, of social rules; social rules are demarcated as 'law,' which a man can be compelled by the constituted authorities to observe. These authorities, the courts, are easily distinguished among the Tswana. But Tswana precedents and practice, which are in theory the basis of the law, are not written. "We may, therefore, regard as a law any rule of conduct likely to be enforced by the courts if and when it is brought before them." Schapera confesses that this definition may be "unsatisfactory to the purist," since "it possibly means the inclusion of some rules the courts will not enforce if put to the test." This apology is unnecessary. It is, after all, the best definition that a European jurist, writing a textbook on some part of the law, can give; and Schapera's handbook is to be a guide, not a code. It is also the best definition of law (juristic rules) that a sociologist can give.

Despite this demarcation, the book does not give a formal account of these rules only. They are described in the whole setting of the Tswana's social system and their activities and ceremonials; and in these descriptions rules unenforceable at law, but sanctioned in other ways, are included, though the legal rules, and the remedies the court will adopt to enforce observance of them, are always clearly indicated. Though Schapera has deliberately not dealt "with Tswana government and law as actually seen in practice," the mention he does make of this wider sociological background of law is full of promise for the book on this theme he says he is going to write.

The customs and law here considered are those observed to-day, though Schapera continually describes what the old laws were, and how the present-day laws have developed. He excludes from his survey all laws affecting the relations of Tswana to the Administration and other Europeans, as these are not cognizable in Tswana courts. Nevertheless, he notes where Government proclamations have limited the jurisdiction of native courts, and regulated their procedure and punishments. He also shows how resilient the Tswana legal system is to new conditions, both by chiefs' legislation and judicial decisions.

In this brief review it is impossible to discuss the actual body of Tswana law, as described. Particularly valuable are the analyses of Tswana constitutional law and custom; of the difference between liaisons, and marriages constituted by publicly approved union, and the full family, with the children going to the father, as established by the payment of bride-wealth; of the actual meaning of 'permanent usufruct in land' and 'communal tenure of land.' In the whole analysis Schapera has given us a magnificent account of all aspects of Tswana law, in my opinion the best account of law in African literature.

The book is not only a juristic document. Much in it is important for other sociological purposes: e.g., Schapera describes how the Tswana make more specific the relationships of classificatory siblings by 'linking together' certain brothers and sisters: with variations the general principle is that eldest son is linked to eldest daughter and second son to second daughter; eldest son is linked to third son, second son to fourth son, and similarly with daughters. Linked siblings have a special relationship, and it is, e.g., a woman's linked brother who is the special maternal uncle of her son. They have special rights against, and duties to, each

other. This linking of siblings is a noteworthy contribution to the study of kinship.

I would suggest to Professor Schapera that when he prepares the second edition of this book he add an analysis of the fundamental legal concepts of the Tswana, and state whether they generalize them. For example, he records that if a purchaser has a heifer pointed out to him, but does not take it from the seller's cattle post, he is entitled to its issue; but if it dies or strays, he cannot claim compensation. That is, to point out a beast constitutes legal delivery; and the maxim 'where the risk is, there is the benefit' applies, as in Roman law. Do the Tswana (as the Zulu do) formulate these maxims? Do they apply to the purchase of corn, a pot, a blanket? Schapera quotes many Tswana maxims: these, and other unformulated principles, might well be analyzed.

That Professor Schapera's analysis of the body of Tswana law raises these fundamental questions of African legal concepts is a tribute to his deep knowledge, and to the sociological and juristic clarity he has brought to bear on his demarcated problem.

MAX GLUCKMAN.

Bantu Heritage. By H. P. Junod; with illustrations by A. M. Duggan-Cronin and Elaise Junod. Johannesburg. 141 pp., bibliography and index.

102 It is difficult to imagine a more appropriate tribute to the work and to the memory of the late Dr. H. A. Junod than the invitation addressed to his son, by the Transvaal Mine Medical Officer's Association, to deliver before them a series of lectures on the life and customs of the Bantu. That invitation in 1936 was also a tribute to social anthropology as such and, incidentally, to the liberal outlook to-day so manifest within the one area in South Africa where black and white are in continuous, interdependent contact; the Mining Communities of the Rand.

What is, however, still more noteworthy is the fact that the lectures in their original form proved of so much interest that a repeat-series was requested in order that the Compound Managers and their staffs might have the benefit—"In spite of the exacting duties of Mine Compound staffs, members of those staffs from all parts of the Reef attended the lectures in Johannesburg for five nights in succession. Not only so, but, in contrast to usual experience, the attendance at the later lectures exceeded the already large attendance at the first lecture."—(Introduction).

It may be said at once that the volume now in our hands as a result of that significant experiment fully explains the interest taken both by the medical audiences and by the wider secular audiences of mine staffs. And we owe it to the Chamber of Mines and their publishers that Junod's work is available for general enjoyment in such a delightful and charming format. The forty plates are largely drawn from Duggan-Cronin's magnificent collections. Not since Dudley Kidd's *Essential Kaffir and Savage Childhood* have we had such unexceptionable partnership between author's text and the camera.

The lectures covered an ethnological introductory talk, a section on language, with special references from the lecturer's Shangaan-Tonga group, a very fully illustrated section on folk-lore and proverbial wisdom, a composite section on social organization involving not only the family and sex-life with the idea of justice and its administration, but touching also on etiquette and the Bantu heritage in music, and then, finally, two sections on the Bantu mind, with the second devoted to its 'religious' thinking. One does not know how far the material was expanded from its original lecture form, but it is obvious that the lecture audiences

got a magnificent survey of all that it means to be an African.

If there is one point of criticism, it is that the old use of the phrase 'ancestor-worship' is maintained here, without any reference to recent suggestions for emendation with a view to a less misleading approach to Bantu religious thought. The actual situation being one of 'continuing conclave' with the elder-statesmen of the group in an atmosphere of communal familiarity which may permit, not only of argument with the 'departed' but even, where needed, of rebuke and expostulation, it is important that we remove the implications of 'worship' natural to our non-Bantu minds.

In the case of marriage, also, and the social organization, some of us think that sufficient attention is not yet being focused on Africa as the stage upon which the whole evolutionary process of marriage as a two-party experiment is still visible before our eyes under laboratory conditions: from girl-for-girl exchange right across the spectrum to the full South African *lobolo* condition of complete husband-group supremacy. The importance of recognizing this is perhaps as great for the Christian missionary as for any other, since in 'Christian marriage' we can go to the Bantu not with a foreign intrusion but actually with the last and crowning experiment in the long series; where husband-group and wife-group are equally concerned in the welfare of the new household and where the age-long struggle between matri- and patri-dominance is at last seen to be nearing solution.

One mentions these points in conclusion not so much as criticism but as suggestion. This book of Mr. Junod's leaves one much too grateful for there to be room in reviewing it for anything but a most sincere gratitude and appreciation.

CULLEN YOUNG.

The Yoruba Husband-Wife Code. By Edward Ward, M.A. *Catholic University of America. Anthropological Series No. 6.* Washington, D.C. 1938. viii+175 pp. Price \$1.75.

This monograph, supposedly on the Yoruba as a whole but actually based on an acquaintance with three marginal subdivisions of the people, reveals glaring dissimilarities on almost every page to what are known to be the corresponding sentiments, practices, and customs of the rest of the people. Even then, some at least of the author's assertions and explanations are known to be unrepresentative of two of these subdivisions, namely, Ondo and Ekiti.

Apart from a reference in two subsidiary passages to 'his relatives,' the writer has eliminated from this study all consideration of the considerable influence a Yoruba man's family exerts on his relationship with his wife, as well as the part played by the family, both individual and extended, in the elaboration and maintenance of the Yoruba husband-wife code. The omission constitutes a serious flaw in a thesis that seems to be founded more on speculations than on ascertained facts. What happens to an individual wife—whether in the matter of care and protection, sexual attention, fair treatment and ill-usage—is not the exclusive concern of her husband alone, but that of his Extended Family as well.

A *ménage* of 200 to 400 wives for rich men is unlike what we know of Yorubaland, with a wife costing a man between £12 and £14. My recent information is that even the Ruler of Ondo has about twenty only. There is no Yoruba word for masturbation; hence its supposed prevalence among men and women must be an exaggeration.

N. A. FADIPE.

The Bantu Tribes of South Africa: Reproductions of Photographic Studies. By A. M. Duggan-Cronin. Vol. III, Section I, Plates LXXXI-CXX. The Nguni. Section III. The Zulu.

With an introductory article on the Zulu, a Bibliography, and Descriptive Notes on the Plates by D. McK. Malcolm, B.A., Chief Inspector of Native Education, Natal. Cambridge University Press.

The beauty and distinction of Mr. Duggan-Cronin's photographs are still further revealed by these studies of Zulu life and customs. Dr. Malcolm's task in writing a concise and popular account of the Zulus as an introduction, and in annotating the plates, was no easy one. In this lovely book we find a picture gallery of chiefs, warriors, women with their babes, young hunters, and inhabitants of the kraals at their daily occupations. To preserve balance, there might have been a study of children at play, at home, and one of children at their work in school, to show their eagerness to learn, and their adaptability to new circumstances.

Some of the notes might have been a little more explicit. Plate XCII indicates that a woman "has put up her hair again" when her baby is nine or ten months old. This seems a rather tame way of stating that that particular mode of hair-dressing is the sign of a married woman of full status, in this case restored to her former position in the kraal after a period of separation consequent upon the birth of the child. Plate XCV depicts a Zulu girl, but we are not told that she is wearing full ritual insignia. Plate XCVI shows a Zulu boy wearing a cap of clay, and we are told that this is due to Thonga influence. As a matter of fact, some of the Thonga use this cap for removing the kink in the hair in order to imitate the white people's hair. Plate CVII shows a man tanning a hide, but we are not told what preparations, such as plant decoctions, are used in the actual tanning. Plate CXI portrays a hemp-smoker making patterns with spittle, with a man attentively watching "to see how he may, in turn, beat him in the intricacy of his efforts." As spittle is used in divination, the picture gives one the impression of a diviner and his client.

A short note on the orthography would have been useful. The International orthography does not seem to have been consistently followed, and the clicks are not indicated. But taken as a whole, this is a book of outstanding merit, which should find a place in every missionary and ethnographical library.

E. DORA EARTHY.

South-West Africa in Early Times: Being the story of South West Africa up to the date of Maharero's death in 1890. By Heinrich Vedder, Ph.D. Translated, edited and slightly shortened by Cyril G. Hall, LL.D. Oxford, 1938. Price 15s. net.

This work was originally published in German, and contains, not only a history of the country up to 1890, but much detail of the ethnology of the people, their speech, customs and ideas, collected by the author during a long sojourn in this part of Africa. It is essentially a book for the armchair. Much of the information given is of interest, but many details are only of local importance. Anyone interested in this country will find perusal well worth while, especially when European political considerations are focusing attention on those African areas which were formerly under German administration. That administration was first exercised in 1884, but the death of Maharero formed a convenient point at which to conclude the early history of South West Africa, and it is intended to publish a sequel dealing with the German occupation.

M. C. B.

CORRESPONDENCE.

Observations on Mr. Francis Rodd's 'Rock Drawings
106 'from Air,' compared with Dr. Winkler's
'Rock Drawings from the Eastern Desert of
Upper Egypt.' Cf. *J.R.A.I.*, lxxviii, 1938.

SIR, — All who are interested in the ethnology of the Sahara and Sudan will welcome Mr. Francis Rodd's analysis of 'Some Rock Drawings from Air in the Southern Sahara,' published in the *Journal of the Royal Anthropological Institute*, LXVIII, 1938. There can be no doubt that his differentiation into four classes of the drawings with which he deals is justified, and that the designation 'Tuareg' may be applied to all of them. On the other hand, as Mr. Rodd himself points out, their precise significance is in several respects open to variant conjecture.

With regard to "omission to depict the mouth" in the drawings he observes that "the writer is frankly at a loss to explain the problem."

No one in the present state of our knowledge can be quite sure on a subject of such complexity, but it is at least possible that the differentiations of dress in these drawings is not so much due to differences which can be termed ethnic, nor yet to very great difference in the respective periods of their execution, but to differences of caste, status, or habit in the different classes of persons depicted. With regard to Type I, for instance, "The 'hour-glass type,' it may be (and probably is) the case that its original model was the leather *jibbeh*, with belt, formerly worn by warriors not only in the Sahara but in parts of the Sudan. In effect, however, these figures depict the general appearance of present-day Sudanese or Saharan warriors, who have in Biblical phrase 'girded up their loins,' otherwise 'belted knights.' The parallel must perhaps not be unduly pressed, but it is at least noteworthy that in Dr. Winkler's recently published *Rock Drawings of Upper Egypt* (Egypt Exploration Society, 1938, p. 16), it is noted that "in many Blémy drawings from the Eastern Desert the body is eight-shaped," i.e., presents an appearance similar to that described by Mr. Rodd as "hour-glass."

Regarding Types III and IV—the former of which wear square-patched *jibbehs*, while the latter wear baggy trousers, with the shirt hanging outside them in accord with Sudanese fashion—Mr. Rodd thinks that certain examples "lead one to the inevitable conclusion that the two types of dress were being worn contemporarily, while the different head-shapes suggest at least two different modes of head-ornamentation." As the conversion to Islam of Tuareg in Fezzan began about the eleventh century, when some of them first came down to Air, it may perhaps be supposed that Type III represents in some measure the pre-Islamic dress of the Saharan races who were called Temehu by the Egyptians; while the baggy-trousered Type IV were Moslem Tuareg.

The fact that in five of the drawings of Type III the subject carried three small spears (the correct number for a Tuareg warrior) may indicate that they represent males, while the fact that all Mr. Rodd's examples of Type IV (with the baggy trousers) have also a circular flanged disk as 'head,' may probably be connected with the wearing of some sort of 'turban,' with or without a chin piece as veil. A mere circular strip of cloth round the head with mouthpiece attached is quite common on the Southern fringe of the Sahara. But it may further be observed that while the garments of Type III are perhaps analogous to the garments of the Temehu Libyans reproduced (after Bates) in Mr. Rodd's Plate VII, they are also very similar to garments even now worn by the personal attendants, or household slaves, of chiefs in Bornu and the Sahara.

The conventionalized head of Type IV is also similar to

that of the Blémy camel-riding warrior shown in Plate III, 18, M. 167 in Winkler's *Rock Drawings of Upper Egypt*, only that the latter is better drawn and more like a Tuareg.

The absence of any indication of a mouth in Mr. Rodd's drawings is a feature which they share in common with the Blémy pictures found at Karanog by the Eekley Coxie expedition, and with the Blémy pictures found in the Eastern Desert by Dr. Winkler and reproduced in his recent work mentioned above.

The meaning of a number of strokes either vertical or at an angle on the top of the heads of Type III is perhaps doubtful. Mr. Rodd equates them to the ostrich feathers of the Egyptian Temehu drawings. It is possible that they are feathers, especially if the figures represent the personal attendants of chiefs. They may even represent the head-dress of some deity, e.g., the Egyptian God Min, for the custom of putting feathers in the hair for magical purpose on festal occasions is pretty widespread in the Sahara and Sudan. On the other hand, a *tagia* (Tamshek *igiran*) or cap with horns was a common Saharan head-dress in the twelfth century, and it is not impossible that some of the strokes have that significance.

There remains Mr. Rodd's Type II, the 'demon' or 'imp' figures, which in point of (a) their two-horned appearance and (b) the presence of a conical head-dress comparable to a 'Phrygian cap,' might be comparable not only to many of the Karanog Blémy drawings, but also to the Blémy Phrygian-cap head-dresses shown on Dr. Winkler's plates, and the cap of the traditional 'Jausar of Bukheras' in Nubia, who had the 'two horns' and the golden bracelet, and probably is represented in a picture found at Karanog. (Palmer, *The Bornu Sahara and Sudan*. London: Murray, 1936, p. 135.) Yet as they are associated with elephant and giraffes, it would seem more probable that the 'imp' class of drawings Type II are in general meant to represent negroes.

It is noticeable that to the arms of several of the figures in Mr. Rodd's glyphs is suspended a circular object which may very possibly be a bracelet of stone or metal, and in both Mr. Rodd's pictures and those of Dr. Winkler several camels carry a skin water-bag.

The settlement of Tuareg in the Air region both on the authority of local records, which Mr. Rodd mentions, as well as on Arab historical data, cannot be placed earlier than the eleventh or twelfth century. Tuareg did, however, come down to the Upper Niger Region as early as the seventh century. In any case, therefore, the Tuareg glyphs in Air cannot well be earlier than the seventh century A.D., which, on the one hand, is a far cry from the days of the Temehu, and on the other is contemporaneous with the extensive displacement of Saharan peoples which was the result, firstly, of Abyssinian invasion and other upheavals in the Nile Valley, and, secondly, of the Arab invasions of Africa.

In the Eastern Desert of Egypt roads from Egypt lead to Koseir and Aidab on the Red Sea. Dating from the period 250–450 A.D., Dr. Winkler's Blémy glyphs found in that region show a people who used the Tuareg oblong shields. He writes that: "In Blémy times the camel appears for the first time in the desert drawings, and it appears not sporadically but as the favourite animal of those desert dwellers. They introduced the animal into the country. The multitude of camel-marks, as well as the camel drawings, prove that the importation was completely successful. By the camel these people became wealthy. This favourable change of the base of material life explains the sudden rise of the hitherto nearly unknown Blémies in the third century A.D. to a power menacing Roman Egypt." (Winkler, p. 16).

Besides being almost an echo of Ibn Khaldun's description of the origin of the Mulathemim or 'Veiled Tuareg' "in the *rif* of Abyssinia," this latter sentence could also *mutatis mutandis* be applied to the change in the North African Roman times about 500-600, A.D. as compared with the Roman times of 1-250 A.D., a change which was caused by the camel. (Gautier, *Les Siècles Obscurs du Maghrib*. Paris: Payot, 1927.) Hence the inference supported by many other considerations set out in the writer's work, *The Bornu Sahara and Sudan*, that it was mainly the same camel-owning races who were responsible for identical phenomena both in the Eastern Desert and in the Sahara, and that they are the Tuareg of the Sahara. Since 300 A.D. dress, customs, religion and even physical type have been subject to constant change throughout the Sahara and Sudan, but fortunately the kingdom of Bornu (originally a kingdom of Tuareg nomads) has retained, either in its records or customs, enough of its pre-Islamic garb and ritual to supply certain cultural links, which would otherwise have vanished, between the ancient Eastern Desert on the one hand and the modern Sahara on the other.

More particularly is this the case with pre-Islamic religious and cultural ideas, for, incomplete as data and study are, it is evident that at one time the gods of Kanem and of the Southern Sahara were those of Meroe, and of the Blemyes. But it will be said that cultural connexion between the Sahara and Red Sea, even if proved on a large scale, together with an analogous common camel-basis of material life, are not sufficient proof of ethnic connexion between the Tuareg and Blemyes, much less of ethnic identity. That is true, though it must be remembered that the 'noble Blemyes' were a comparatively small caste, as were and are the 'noble Tuareg,' and that the bulk of the Blemyes, as in the case of the Tuareg, would be 'freemen,' 'serfs,' or 'slaves,' of mixed origin. On the other hand, a certain degree of ethnic probability as regards origin is indicated by the fact that in the very old Abu Zeid cycle of legends concerning the coming of the Arabs to North Africa in the seventh-eleventh centuries, the name given to the Tuareg with whom they fought is Ilam—Ilam being equivalent to Armi or Aramka, an ethnic term applied by the Kanuri of Bornu to white North Africans who were not Tura, the latter being a name applied by the Sudanese originally to Phœnician traders.

The name Ilam is clearly connected with the tribal names¹ Lamta and Lamtuna, etc., etc., which were given by the Arabs to Tuareg units, and to the Arab name for the Tuareg shield *lamtiya*. On the other hand, an inscription at Philæ seems to indicate that the Meroitic

aristocracy were also known as Arumi. (Palmer, *The Bornu Sahara and Sudan*, p. 138n.)

The inference to be derived from the application of this nomenclature is supported by the common belief in Bornu that both the Tuareg and Tura originally came from Syria (from Aram) and came into the Sahara via Arabia: not that they were of 'Arabian origin.'

If, however, this tradition is rejected, we would expect that there should be some plausible explanation of the fact that, alike in the Blemyan drawings of the Eastern Desert, in drawings found at the Blemyan city of Karanog, and on the Air rocks, men are invariably depicted without mouths; and that, as far as the writer is aware, covering the mouth, as an indication of rank, is the rule from Abyssinia to Senegal, and nowhere else in Africa.

If the last-named inhibition or custom did not evolve itself on the Red Sea littoral, it must surely have come from the East, not the West. But the articles of Asiatic apparel which most closely resemble the Tuareg *litham* are the mouth-veil shown on figures in the stairway at Persepolis, the capital of Achaemenid Persia, and the veil (*pardam*) which covered the mouths of officiating Magi. During the Achaemenid period many colonies of Medes and Persians went forth from the Persian Empire to Asia Minor and further south. They were of a feudal military type, more or less nomadic, and after the death of Alexander the Great were often a thorn in the side of the Romans. Mithridates VI Eupator, for instance, made extensive use of them as auxiliaries, and it was when at war with him in 74 B.C. that the Romans first saw camels at the siege of Cyzicus. It was the Iranian people of this type who introduced the worship of Mithra into the Roman Empire, so that in the time of Diocletian 284-305 A.D. Mithraism came to be recognized officially as the chief cult of the Roman world. That date is almost contemporaneous with the zenith of Blemyan ascendancy in the Sudan, and Cumont observed that Europe was never more Asiatic than at this period. It was also the period when camels first arrived in North Africa in any considerable numbers, though by that time they had become very numerous in the Eastern Desert of Egypt, among Blemyes who combined the worship of a deity called Mandulis (in fact a solar cult, not dissimilar to that of Mithra) with the local Egyptian cults at Meroe and elsewhere.

It is therefore not surprising that in describing one of the recently discovered Blemyan rock-drawings (Pl. V, i) in his work above mentioned Dr. Winkler observes that it comprises "a man on horseback (*mouthless*) in the attitude of St. George, the God Min, and a camel. All these men are shown full face, wearing the Phrygian cap." My first impression was that they were Mithraic representations.

In this connexion the mythological content of the *Dionysiaca* of Nonnus of Panopolis, written about 390-405 A.D., which is in general accord with statements about the ethnic affinities of the Blemyes made in other Greek and Roman authors, is not irrelevant. The poem opens by Cadmus, in alliance with Zeus, coming to a people named Arimi who, according to some authorities, inhabited Cilicia, according to others Lydia (Strabo, XII, 8, 19 (579)) and Syria. Strabo, XII, 3, 27 (555); XIII, 4, 6 (627), mentions Arimi Mountains in these regions, and in the latter passage states that "Others understand 'Syrians' by the Arimi who are now called Aramæi, and maintain that the Cilicians in the Troad migrated and settled in Syria." In XVI, 4, 27 (785) Strabo, who lived 66 B.C.-24 A.D., notes that Arimi is a variant of Aramæi and means 'people of Syria' or Syrians.

¹ See picture from Karanog reproduced in Palmer, *The Bornu Sahara and Sudan*, p. 137.

¹ On the map of Iacopo Gastaldi, dated 1561, the eastern desert south-east of Aswan and opposite Dongola is marked *Regno de Bello*, and Gaogha (Fetri) and Bornu march with Nubia. In a map published in the *Quai d'Horloge* at Paris in 1709 the desert to the west of Egypt is marked as inhabited by Levata or Lebetes, to the west of whom are the towns Zeila and Zuila and the land of Fezzan, while to the south of Fezzan is the 'Desert of Ighidi,' inhabited by 'Lumpta and Lump-tunes called Murabatin by the historians,' and south of this again, the land of Kavar with another 'desert of the Lump-tunes, a nation proud and brutal.' South of the latter is the kingdom of Kanem. On this map also the kingdoms of Bornu and Gaogha extend to Nubia, and the Teda are called Berdoa. The data incorporated in these maps seem to distinguish between the Lamta and Bello (Al Bélium = Blemyes) on the one hand as 'Warrior castes,' and the Levata (Libyans) Buga (Beja) or Berdoa (Teda) on the other.

Later on in the poem, Dionysus defeats races described as Indian, whose king Deriades had as generals Orontes, Aruandes, and Blemus, the last named of whom submitted to Dionysus and was made 'king of the people' of Meroe, known henceforth as Blemyes.³ Of the two other names of generals, Orontes connotes Syria, while Aruandes or Aloandes stands for the later name of the Meroitic kingdom, viz., Aloa.

The terms Ilam and Armi probably dropped out of common use among the Kanuri in Bornu soon after 1386 A.D., when the Kanem kingdom collapsed, but their meaning and connotation in Bornu appears always to have been similar to that of the classical terms Arimi, Blemyes, and Aruandes of Meroe, suggesting that the Meroitic aristocracy and the aristocracy of the Saharan Ilam were cognate.

In Dr. Winkler's work, Pl. III shows a warrior (mouthless) riding a dromedary and checking it to throw a spear, a picture which vividly recalls not only the classical descriptions of Blemyan chivalry, but Procopius' descriptions of desert tactics in South Fezzan about the middle of the sixth century, as well as the methods and appearance of the modern Tuareg. Dr. Winkler further notes with regard to these Blemyan pictures that "The lion-fighter, the duel, the horse-riding and Min are accompanied by the word *Φωρις* and by the inverted T." Following the pictures on which Dr. Winkler comments as above is one (Pl. VI, 2) which shows an ox with a curious triform-shaped symbol or ornament in place of horns, and bearing the legend *Apollon Kephala*, i.e., 'head of Apollo.' This suggests that *Φωρις* in the other pictures stands for Phoebus Apollo, i.e., the Greek equivalent of Min as a 'storm-god' = 'shining god,'⁴ and also probably the Blemyan Mandulis who 'came from the East,' and, according to the late Prof. Griffith,⁵ was looked on as a 'solar god' and was of a foreign (*To'ntr*) origin, which (Prof. Griffith thought) probably signified Arabian. Mandulis was 'great among the deserts,' and perhaps was identified with Mithra.

Thus it would appear probable that the inverted T stood for a storm-god pillar, while the ornament on the bull's head was the 'thunderbolt.' It is noticeable that all these figures use the oblong *lamtiya* shield as well as wear the Phrygian cap. The pictures may suggest also that in the references of Abu Salih the Armenian (1208 A.D.) to the Blemyan Bukheras, in Nubia, as "the dwelling place of Jausar, who wore the turban (*tagia*)" and the two horns, and the golden bracelet, Jausar is the name, not of an ordinary king, but of a divine king or god, who was identified in some respects perhaps with Dusaros-Ares of Nabatea, and also with Mandulis,⁶ Min, or Mithra and Apollo of the Greeks, all of whom were represented sometimes as a bull.

There are various other points about Dr. Winkler's Blemyan rock-drawings which are of note—particularly the trilith sun-altars—which connect themselves both with Meroe and the Sahara.

On the whole it would seem that these recent discoveries in the Eastern Desert of Egypt tend rather to confirm the data to be derived from classical and Arabic authors, and from Sudanese tradition, rather than support the supposition that the Tuareg culture and custom was derived from the Libyans of the classical era, or (directly at least) from the Temehu of ancient Egypt. It seems perhaps more probable that the 'noble' Tuareg of Fezzan in the period 350-600 A.D. were an

invading aristocracy, at first small in numbers, who had migrated west with the camel, because Nubia and the Eastern Desert of Egypt had become unpleasant for them, particularly when (towards the end of the sixth century) Nubia was converted to Christianity and Silko the Christian king of the Nabatae "fought with the Blemyes and God gave me the victory . . . and I conquered them once for all, and made myself master of their cities and established myself therein together with my troops."⁷ In *The Bornu Sahara and Sudan* I put forward some reasons for supposing that the name of the 'fire god' Midila, worshipped among the Teda and in the North of Kanem, from whose name the Hausa expletive *madala* is derived, was a variant of the Blemyan god name Mandulis,⁸ and the Abyssinian Medr.⁹

In view, however, of the inferences to be drawn from Dr. Winkler's Blemyan rock pictures, coupled with the fact that there still exists in Bornu a sect, nominally schismatic Moslems, who are termed 'star-gazers,' and conduct their worship in an underground grotto (*spalea*), a sect of which the origin is lost in antiquity, I think it not impossible that Mandulis and Midila and Medr were all African adaptations of Mithra.

H. R. PALMER.

The Negritos of Malaya. Cf. MAN, 1939, 31.

107. SIR,—Living, as I am at present, in a somewhat remote part of Borneo, Father Schebesta's reply to my criticisms of his methods, rather than, in most cases, of his work, has reached me only recently.

I note that Father Schebesta has made no comment on my strictures with regard to his opening a Negrito grave, an action that he himself describes in his book; nor does he say anything with regard to my unfavourable references to his "discovery" of the Cheka Negritos in 1924-25, after I had published an account of them in 1915. Pages 275-276 and 29 of my book deal with these matters.

Now to take Father Schebesta's reply point by point:—

(1) I have not MAN (1927, No. 61) with me here, but Father Schebesta made the quite definite assertion that none of his predecessors had discovered that the Negrito groups had tribal names. I have said this in my book (p. 22). I do not think that there is any room for a misunderstanding.

(2) Father Schebesta now says "I only stated that I mastered the Jehai language (in six months) sufficiently to be able to make myself understood, and that I was able, with the aid of the Jehai language to survey other Negrito idioms from the standpoint of grammar and vocabulary." Making oneself understood in a language may mean anything, or almost nothing. What he wrote in his book (pp. 92, 94) was: "It was my ambition to learn the Jehai language so well that I could use it in talking to anyone and record information about the views and customs of these strange dwarfs in their own language." "Jehai" had become for me the standard language by which I could fix my methods in learning the other native languages."

I note that he admits faults in his Malay, but he says that I ought to take into consideration that he has intentionally held fast to the pronunciation of the Negritos. I have, as a matter of fact, done so. I wrote,

³ Budge, *History of Ethiopia*, I, p. 114.

⁷ The name Mandulis was spelt in Demotic of the Roman period as 'Mrwle' and 'Melwle,' and once (at Philae) as 'Mtwle.'

⁸ Palmer, *The Bornu Sahara and Sudan*, p. 123, and notes on pp. 138, 199, 203.

³ Wainwright in *Journ. Eg. Arch.*, Nov. 1931; Dec. 1935.

⁴ *Journ. Eg. Arch.*, May 1929, p. 72.

⁵ See Woolley and MacIver, *Karanog*, Philadelphia, 1910, pl. 81.

"Occasionally errors in Malay may be due to his using 'dialect forms,' but surely when Malay words are added by way of explanation, he should have given accepted forms of them.

3. My remarks in regard to Father Schebesta's exalting himself at my expense rested, as I said, on a statement made to me by the Negritos.

4. Father Schebesta denies that he met his informant Mempelam in Taiping, saying that he first encountered him at Kupang, in Kedah. He does not say, I note, that he did not meet him through me, which was the only point that mattered. Father Schebesta's memory of an event, that concerned him more closely than it did me, should be better than mine. Tropical memories, and mine is such, I suppose, are proverbially bad, but I was certain that I had sent a Malay, named Alang, to look for Mempelam for Father Schebesta, and I thought that, had I been unsuccessful in getting him, I should have remembered it; because I don't like failures. On seeing Father Schebesta's reply, therefore, I immediately wrote to the present Clerk and Caretaker, Perak Museum, Taiping, asking him if he was employed in the museum at the time of Father Schebesta's visit—he has been there many years—and, if so, what he remembered about the affair. I may remark here that Alang (former Game Ranger) and Pandak, mentioned below, are both dead, so is one of the present Clerk's predecessors, while I have lost sight of another man, who was at the museum for a short time only. The following is an extract from the reply that I received:—

"I regret to say that I was not yet in the museum when F. S. (Father Schebesta) arrived. Sa'at could not recollect his visit here, but Mat Taib, our ex-orderly, informs me that he remembered that you sent Alang and Pandak to Ulu Selama for the Negritos, and that F. S. joined them. He could not say where the introduction to Mempelam took place, as Alang returned alone after some fortnight." It becomes pretty clear, therefore, that I did send a man to find Mempelam for Father Schebesta, and highly probable that Father Schebesta *did* meet him through my agency. Father Schebesta says that he first met Mempelam at Kupang, in Kedah. My memory is that Alang, not finding Mempelam at Ulu Selama, Perak, where I sent him first, went over the boundary into Kedah where, as a Perak Government official, he had no business to be, and, if he went into Kedah, it would have been to Kupang, the stronghold of the Kintak Bong group. I thought, however, that he brought Mempelam to Taiping. If it is correct that Father Schebesta met Mempelam at Kupang, through my agency, it is somewhat disingenuous of him merely to say that he did not meet him in Taiping.

IVOR H. N. EVANS.

Kota Belud, British North Borneo.

A Luo Body-Shield. (Cf. MAN, 1939, 37.) *Illustrated.*

108

SIR,—I enclose a photograph of a Luo man with shield and spear. The Luo shield is very interesting, because as far as I have been able to ascertain it is different from shields of any other East



LUO BODY-SHIELD: HORIZONTAL CROSS-SECTION.

African tribes. The one in the photograph is a small one for a youth, and measures 2 feet 11½ inches from top



A LUO BODY-SHIELD.

to bottom, and 4 feet 6 inches across. Many of the Luo shields are very much larger.

In shape these shields somewhat resemble certain shields depicted of ancient Assyria, of the Medes, and of the ancient Egyptians. But I am of opinion that the Luo evolved the pattern themselves. As will be seen in the photograph, the sides of the shield are bent back on either side of the holder so as to envelope his body in front and on both flanks. The shield resembles the Bantu spindle-shaped shield but is held sideways with the two halves bent at right angles. These are firmly held in position by a crossbar which the warrior holds. The whole shield is a strong structure of buffalo hide. They are now very difficult to obtain, as the Luo are one of the most peaceful and progressive tribes in Eastern Africa.

Kitale, Kenya Colony.

H. F. STONEHAM.



Figure 1

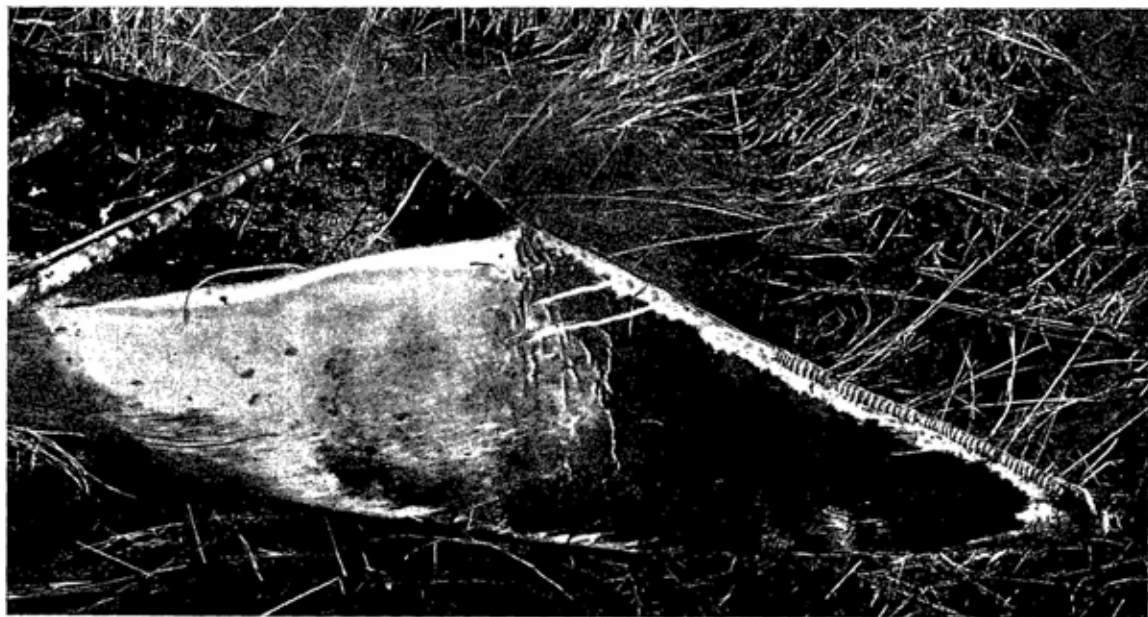


Figure 2

BARK CANOE FROM CENTRAL ARNHEM LAND

MAN

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With Plate H.

Thomson

THE TREE DWELLERS OF THE ARAFURA SWAMPS: A NEW TYPE OF BARK CANOE FROM CENTRAL ARNHAM LAND.¹ By Donald F. Thomson.

109 In a recent communication (MAN, 1938, 216) I described a fish trap of a peculiar type from the Glyde River district of Central Arnhem Land, Northern Territory of Australia. The Glyde River drains an extensive area in North-eastern Arnhem Land, which, during the wet or rainy season, is converted into a great inland swamp, and under these conditions there has been developed the most specialized culture that has yet been described in Australia.

Towards the end of the rainy season thousands of Pied or Magpie Geese (*Anseranas semipalmata*) resort to these swamps to breed. As the nesting season approaches, the natives of the Djinba, Kanabingo, and neighbouring groups, whose territories lie around the Arafura Basin, converge upon the swamps and establish their camps on the high ground on the margin, from which they make extended journeys into the flooded area in quest of the geese and their eggs. A bark canoe, specially adapted to the conditions of travel in the swamps, and of a type very distinct from the bark canoe in use on the rivers and estuarine waters, is employed, and on these expeditions the natives build platforms in the trees, on which they sleep and cook their food.

During October, 1935, towards the end of the dry season, I carried out a survey journey across Arnhem Land, from the Crocodile Islands to Blue Mud Bay. We crossed the Glyde River about twenty miles inland, where at this season of the year it was reduced to a trickle of water. After crossing

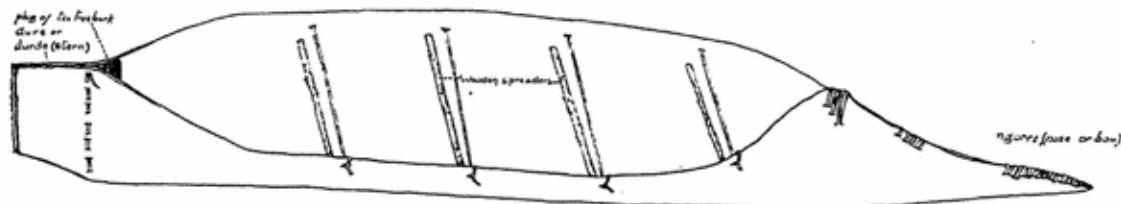


FIG. 3.—Bark canoe called *ngardan* developed in adaptation to the conditions in the swamps of the Arafura Basin and used only in that area. The bow is sharply pointed, by transferring the seam to the dorsal surface. No strips or strakes are employed to strengthen the gunwales but these are secured by four or five transverse strips of bast fibre and spread by means of wooden stretchers. The stern is secured by a single vertical seam packed with an adjustable plug of tea tree bark to exclude water. Paddles are never used but the canoe is propelled by a pole, and in open water it is paddled with the hands operated alternately on either side.

¹ The expeditions in Arnhem Land during 1935-37, on which the work presented in this communication was carried out, were undertaken by me on behalf of the Commonwealth Government, and as Research Fellow of the University of Melbourne.

a series of hills we entered a low-lying basin which covered several hundred square miles, surrounded by low, rugged hills outcropping with stone and rock. In contrast with the bare, arid country through which we had recently passed, the country was open and park-like, and studded with tall paper-bark (*Melaleuca*) trees. Underfoot the ground was soft and peaty, and clothed even at this season with a sward of fine green grass.

The natives informed me that in the wet season this low-lying area, fringed on all sides by hills, was converted into a great swamp, into which they journeyed in canoes in quest of the eggs of wild geese. They said that, as there was no dry land, they lived on platforms in the trees. Nothing of this kind had been recorded from Australia hitherto, and I determined to arrange later patrols so that I could be in the neighbourhood at the end of the wet season to investigate these reports. During the following wet season (1935-36) I was absent from the area, but on my return the natives informed me that there had been so little rain that the swamps had not filled, and consequently the geese had not nested. This, however, augured well for the next season.

In the following year, towards the end of the wet season, the natives came in with reports that the swamp was high, and that the geese were already treading down the grass in preparation for the building of their nests. During March (1937) I went inland to join the goose-hunters, and spent some weeks with these people, taking part in two excursions into the swamps.

When the geese begin to nest, the people of all the neighbouring groups, chief of which are the Djinba, Kanalbingo, Milierebe, Mandalpoi and Nikki, converge on the swamp area, where they establish their camps on the high ground. As a protection against the ravages of mosquitoes, which are present in these swamps in almost incredible numbers, houses of a special type are constructed. Most frequently these take the form of large communal houses, known to most of the Tjambar'poingo-speaking people as *lia damalla* (head of the eagle) and to the Djinba and Kanalbingo as *ngolorr*. These are beehive-shaped houses of large dimensions, usually with entrance and exit low to the ground, so that they can be readily blocked with grass to exclude mosquitoes. The framework is constructed of pliant saplings, roofed with paper

bark, *barrakalla*. Where this material is not available a different type of house is erected, called generally *katauwurdo*. There are several forms of this type, but all are built high on stilts and range from a simple platform raised about six feet high on four forks to an elaborate roofed structure erected over a sleeping platform on stilts, the object of which is to enable smoke fires to be maintained underneath the sleeping platform to drive away the mosquitoes.

At this season the women work hard in the quest for vegetable food, and both sexes join in communal fishing expeditions. These camps are situated some distance from the swamp margin, in forest where the 'stringy bark' (*Eucalyptus tetradonta*), necessary for the construction of canoes, is abundant. Here the men begin to make the craft for use on the forthcoming excursions into the swamp.

These canoes (Plate H figs. 1 and 2; figs. 3 and 4) are of a special type known to the Djinba as *ngardan*, and are distinguished from the bark canoe in general use, which is known in most languages of this area as *barwan*. There is no craft specialization as in the case of the manufacture of wooden dug-out canoes, but as a rule each hunter constructs his own craft. Normally each *ngardan* carries one man only, though the canoes are capable of carrying a second person. The most distinctive feature of this canoe is the form of the bow, which is sharply pointed and shaped rather like a shoe (Plate H, fig. 2), which makes it well suited for driving through the heavy grass and other vegetation in the swamps. As in most canoes of the *barwan* type these craft are constructed from a single sheet of bark of *Eucalyptus tetradonta*. The bark is stripped of some of the outer fibre, and is subjected to a process of smoking to prevent it from cracking. It is then folded along the centre with the cambium side inwards, and wedged between two stakes which are driven into the ground to hold the margins together while the seam is sewn. It is the position of this seam that gives the bow its characteristic form. Whereas in the *barwan* or estuarine type the seam is carried down the anterior edge of the bow, which is cut away slightly towards the water-line, in the *ngardan* the seam is transferred to the dorsal surface by the simple expedient of starting it well forward at the keel and carrying it upwards and backwards at an angle of about 25°. The seams in both

types of canoe are sewn with bast fibre, *daiyarrk*, of *balgur*,² or with split *Flagellaria* cane.

There is a further difference in the shape of the stern. In the seagoing type of bark canoe this is generally indistinguishable from the bow, but in the *ngardan* it is tapered, and the edges are brought together and sewn at a point a foot or more from the end of the canoe, leaving a flat terminal stern about a foot in length, which is cut off quite straight. This not only enables a watertight seam to be made, but adds to the streamlined form of the craft, and assists it in riding over obstacles. The bow seam is caulked with clay, and a plug of tea-tree bark is wedged tightly into the seam in the stern, from the inside, to render it watertight (fig. 3).

The canoes are generally about nine or ten feet in length, and rarely exceed eleven feet. No strengthening strips or strakes are used on the gunwale as in the case of the *barwan*, but when in use the canoes are spread as widely as possible, so that they become flat-bottomed. This reduces the draught to a minimum. While the sharp bow assists in driving through heavy grass, its upward slope, together with the shallow draught of the canoe, enables it to ride easily over the top of the tangled water-weed and grass when the water is shallow and also to slide over logs and other submerged objects. To flatten the canoe a series of sticks is placed transversely at intervals, to serve as spreaders. The canoe is further strengthened by the addition of five or six strips of *daiyarrk* (bast fibre), stretched across the canoe above the spreaders. These strips are knotted at one end, the other end passed through the gunwale, carried over, and back through the same hole, this end then being left free, so that it may be adjusted without the need to tie and untie knots (fig. 4).

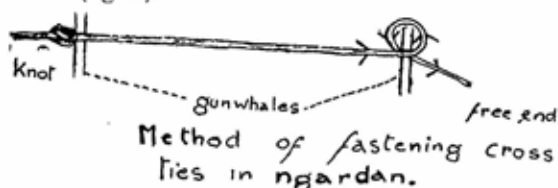


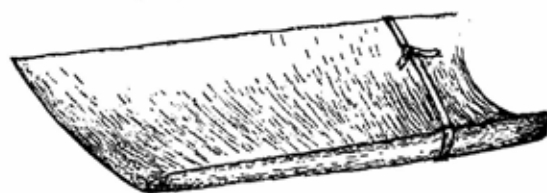
FIG. 4.

Paddles are never used, and are quite unknown with this type of craft, which in the swamps is

² *Daiyarrk* is applied to any bast not yet rolled into string; *balgur*, *Sterculia (Brachychiton) ramiflora*, Benth., is one of the principal fibre plants, the bast of which is used largely for the manufacture of string and rope.

propelled by a pole, *djubarda*, ten or twelve feet in length. The poler stands in the stern in the position as shown in Plate E, I, and this serves further to raise the bow and aids the canoe in riding over water weeds as well as in reducing the danger from snags.

In stretches of open water the native sits on the bottom of the canoe on a sheet of paper-bark folded to serve as a seat, and paddles with his hands, using each alternately. As the craft is light, and offers little resistance to the water, it can be propelled at a considerable speed in this way. The only other item of equipment is a bailer, made generally from one of the pieces of bark cut off when the bow is shaped; this is curled into the form of a scoop and tied with bast fibre (fig. 5).



Bark "scoop" or bailer for
ngardan

FIG. 5.

When travelling the natives halt at intervals to bail the canoe with this crudely fashioned bark scoop. The life of these *ngardan* is never long. The strongest may stand as many as three journeys but more generally they serve only for one or two. In the absence of a current the canoes are not moored, but when on the fringe of the swamps they are drawn up on the bank out of the water, to give them an opportunity to dry, and to prevent the bark from becoming water-logged.

While the natives are making ready, they send scouts into the swamp from time to time to watch the geese, and these men return at intervals with reports of the progress of the nesting. As soon as the geese begin to lay, the hunting party, which may consist of as many as twenty men, moves closer to the fringe of the swamp, where they establish a base from which the expeditions into the swamp are conducted. The camps on the fringe of the swamp are of special interest, for the chief consideration is protection from the mosquitoes. The men alone take part in the

actual goose-hunting expeditions into the heart of the swamp, and the women and children remain behind. Circular, domed, or 'beehive-shaped' communal houses, each capable of accommodating several families, are constructed as before, but additional precautions are taken to protect

these houses before evening, shut and plug up the entrance, and light a fire in the centre, making a slight opening in the roof to allow the smoke to escape. If they should be overtaken at night-fall and obliged to camp in an area where no bark is available, the people of these swamps cut large



FIG. 6.—TREE-DWELLING FOR GOOSE-HUNTERS IN THE ARAFURA SWAMPS.

the inmates against mosquitoes. After the house has been roofed with bark it is again covered externally with grass. Grass is used also to close up the opening through which the people enter.

As the mosquitoes are most active in the mornings and evenings, the natives retire into

heaps of grass, under which they crawl for protection from the hordes of mosquitoes.

From ten to twenty canoes may take part in a hunting expedition. On the two journeys in which I myself took part there were ten and twelve respectively. The canoes set out together,

but when they enter the swamp they scatter and each man, as a rule, hunts independently, so that in this way the area is well covered. The call used in hailing is distinct from the usual cry employed in hunting in the open bush. When they are actually engaged in goose hunting the usual call, 'kai!' or 'ka-ai!', used in the bush is replaced by a loud 'hee-ee!' which carries a great distance in the swamps.

As soon as they reach the camping place, the natives select trees which are most suitable for the construction of the cooking and sleeping platforms. Suitable forks are not always to be found low down in the trees, and the platforms may be built at a considerable height, commonly 18 or 20 feet from the water. No lashings or fastenings of any kind are used in the construction of these tree-dwellings. They consist merely of a framework of more or less straight boughs which are wedged in suitable forks in a rectangular or triangular form, so that they provide the foundation for a more or less level platform. A series of thinner branches or saplings, some 8 to 10 feet in length, are now cut and placed across this foundation to form a floor, which is then covered with large sheets of *barrakalla*, the bark of the swamp *Melaleuca*. Two types of platform are recognized, a small structure which is used exclusively for cooking, known as *makarnbi koiyawirri* (literally 'for fish,' i.e., game) (fig. 6), and the larger and stronger sleeping-platforms, *makarnbi ngerriwirri* (lit., 'platform for lying down'). The sleeping-platforms are very large, and may accommodate as many as six or eight men. More frequently a number of these are constructed in different trees, but on account of the difficulty of selecting suitable trees for their construction they may be situated some distance apart.

Fires are lighted on all the platforms, as a protection against the mosquitoes, as well as for the cooking. A bundle of swamp grass, called *yakki*, is first placed on the platform and this is plastered with a thick layer of mud. The mud in turn is covered with a sheet of paper-bark, and the fire lighted upon this. As the hunters return, each goes with his quarry to the cooking-platform, and there the geese are plucked and cooked. A good hunter may spear six or seven geese during the day, and all that are not eaten on the journey are carried back in a half-cooked state to the camp at which the women and children are waiting. The eggs are cooked by roasting in the

ashes. Most of these, however, are carried back to the camp to be eaten later. In the evening they descend to their canoes, each carrying cooked geese, and paddle off to their sleeping-trees. During the night they sleep very little on account of the mosquitoes, but sit up and talk, or lie beating themselves with fans made from wings of geese.

These *makarnbi* are regarded only as temporary structures, and are rarely used for more than one night on any expedition, for in a day's travel in the swamp the goose hunters may cover fifteen or twenty miles.

Because of the hardship and loss of sleep from the attacks of mosquitoes and leeches, the duration of these expeditions is limited, and even in the short egg-season the goose-hunters rarely remain away for more than seven or eight days at a time. Not only is the work of driving the canoe with a pole through the dense vegetation, day after day, very hard, but the irritation and loss of sleep due to the bites of mosquitoes and leeches, added to the physical exertion, makes the journey a severe ordeal. Apart from this fact, the bark canoes become heavy, sodden and water-logged through constant immersion, so that they are much more liable to damage from snags, and they require to be removed from the water and dried. They must be re-caulked, or replaced, for subsequent expeditions. Many journeys are made during each season, which extends over a period of about two months. The eggs taken at the latter part of this period contain large young, but these are no less relished by the goose-hunters on this account.

The reciprocal nature of the food-gathering relationship between the sexes is well shown at this time. During the absence of the men in the swamps, the women work hard to provide a surplus of vegetable food for their return, and the men in their turn bring back goose-eggs and geese, the latter carried in a half-cooked condition. After living for some time exclusively on animal food, the men return with a craving for a change of diet—for vegetable food. Vegetable food (normally *ngata*) eaten at this time is called by a special term, *takkardait*. Meanwhile the women, who in their turn have been subsisting on an exclusively vegetable diet, are hungry for meat, *kunyil*. These terms denote much more than merely vegetable and animal foods respectively. *Warrakan* is the usual term for all or any

game, *nganak* for meat, flesh, but *kunyil* is employed in the special sense of meat eaten during the craving which results among these people from an exclusively vegetable diet.

THE TREE IN THE RELIGIOUS RITUAL OF THE BANTU OF SOUTHERN RHODESIA. *By F. Posselt, Local Correspondent, Plumtree, S.R.*

110 *The Tree without a Name.* In the Marandellas District, Central Mashonaland, Southern Rhodesia, there stood on a ridge, a few miles distant from the Waddilove Institution, a tree. It was a prominent landmark visible for many miles around. This tree was known to the natives as *Muti-sine-zita*, 'the tree without a name.' Unfortunately some ten years ago it was blown down by a gale.

According to native statements, the tree was so called because it was the only one of its kind. It is related that many natives came from afar to see it, and if possible to identify it, but without success; hence it was widely known as 'the tree without a name.'

Before the European occupation of Mashonaland in 1890, religious rites were performed round this tree, particularly by the Barozwi people. At the specified day the assembly danced round the tree, and offerings of black cloth and beads were made to it. As far as one could gather, the tree was believed to be the abode of some great tribal spirit, and the rites were to propitiate this spirit and ensure the welfare of the community and, if possible, a bountiful season; or the spirit was consulted as an oracle. Unfortunately nothing positive can be ascertained, for the rites have long ago been neglected, and their meaning lost.

A specimen of the tree sent to Kew Gardens for identification led to no final results, in the absence of blossoms or fruit, beyond the fact that it was a species of iron-wood.

Miti Michena.

In the year 1923 the newspapers published in heavy type an account of the human sacrifice in the Darwin District, Northern Mashonaland. The final sequel to this drama ended in some seven or eight natives being sentenced to death for murder but reprieved on the recommendation of the jury.

In 1929 I visited the sacred grove of the *miti michena* ('the white trees') situated at the foot of the eastern buttress of the Mavuradonha ('dripping waters') Range. My escort consisted of the two priests of the Karuwa cult, whose

religious centre was the sacred grove. At the time of my visit the place had become abandoned; some remnants only of the huts once occupied by the Nechiskwa—the spouse of the Great Spirit of Karuwa, the Rainmaker—remained. These were encircled by large indigenous trees, which obviously had been planted long, long ago.

The 'Spirit's wife' was obliged to live within the enclosure and it was strictly forbidden for any males—except the officiating priests—to enter the sacred precincts. Contact with any male was sacrilege in that it defiled the Nechiskwa, and was regarded as a rape; with a result that the angered spirit visited the land by prolonged drought, and refused to be reconciled until the offending male was immolated. The occasion which led to the sensational murder trial was that the chief's son happened to pass the enclosure on the way home to see his young wife. He trespassed within the enclosure and partook of some of the refreshments of the Nechiskwa. This was urged as a rape on the 'Spirit's wife,' and her defilement resulted in the usual prolonged drought. In the end the unfortunate young man was seized, and in the presence of his father tied to a log-pile, at a spot called *gunguwo* ('the crow'), his own father setting alight to the pile to appease Karuwa and thus ensure the speedy fall of rain.

Rushanga—The Sacred Enclosure.

Among the Vazezuru tribes of Central Mashonaland it is still the practice to enclose a space under a large tree, usually the *Mkuna* or *Mhatsha* (*Parinarium mobola*), by means of posts. Within this enclosure are placed the sacrificial offerings of beer and porridge prepared for the ancestral spirits. The head of the family makes the offering within the enclosure and invokes the good will of the spirits, to ensure their benevolence towards their descendants.

Among the Kalanga, such as those of the Bulalima-Mangwe District (Western Matabeleland), similar offerings are made under large trees, usually the knob-thorn, a species of acacia; the space being cleared of herbage and

then swept, but not enclosed by means of a fence.

The Citamuzi or Mupande (Lonchocarpus capassa)
—'The Tree of Discord.'

Among the Amandebele and also among some of the Mashona and kindred tribes, the use of any timber or fuel of the *citamuzi* is strictly tabu. The name literally means 'the scatterer of the village or home.'

Among the Amandebele, a branch of the tree is thrown into the open grave at a funeral, with a farewell to the deceased expressed by the person who throws in the branch. It is the practice among other tribes for a relative or friend of the deceased who happens to be unable to attend the funeral to visit the grave and place thereon a branch of the tree with a farewell greeting. An interesting illustration of the tabu will be given by the following case which came before me at Wankie many years ago. A married couple appeared before me and the wife pleaded for a divorce on the grounds of continuous ill-treatment by her husband. She was the mother of three or four children. The husband stoutly denied any neglect or cruelty. After much questioning it came to light that one of the children had been ill. A sacrifice to the ancestral spirits was necessary to ensure recovery. The husband had slaughtered the prescribed goat, and had cut a branch of the tree on which he placed the meat. The wife objected to the sacrificial meat being brought into close contact with this tabu object, but he paid no heed to her warning or entreaty. The illness of the child was not cured and the mother consequently attributed it to the wilful act of the father, and this led to her application for a divorce.

The Blackened Stump.

It was the general custom among the Amandebele that malefactors executed by order of the king were not buried; the bodies were usually thrown into a ravine to be devoured by carnivora or vultures. The majority of those put to death—by clubbing—were convicted of practising black magic or witchcraft—an abhorrent crime in the eyes of the Bantu people. The members of the royal family, including the ladies of the king's harem, whenever sentenced to death, were required to commit suicide by hanging, the shedding of the blood of royalty being strictly tabu. With regard to the ordinary malefactors,

whenever their spirits became troublesome to the members of their respective families (the bodies having remained unburied), necessitating their propitiation, such sacrifice was offered at the foot of some tree stump which had been blackened by fire. The sacrifice, too, was merely a formality, and consisted usually of an offering of porridge and thin beer, or even water.

The Village Enclosure.

Whenever it was decided to erect a new village, it was the custom of the Amandebele for the senior or head to consult the diviner on the site, to ascertain whether propitious or not. The site having been selected, the heir cut a small branch of the *Umpafa* tree (*Zizyphus mucronata*), and placed it so as to indicate where the village fence was to be erected. The wood of this tree was not used even for fuel except in the wilds when no other was available.

Also at burials, a branch of this tree was placed on the grave, and then covered with stones or logs.

The tree might be removed if the site was required for any specific purpose, but not otherwise.

Cutting Down a Fruit Tree.

Indigenous fruit trees were protected. Should it, however, become necessary for an old-established tree to be removed, or its wood was required, the person desirous of cutting it down first offered some propitiation (*ku pfupira*), that the spirit of the tree might not molest him. A grass covering (*hata yo uswa*) was placed on the stump and weighted down by means of stone, and apologies were offered to the tree for cutting it down. This was customary among the Bazezum tribes of Mashonaland.

The Tree Struck by Lightning.

It is the common practice to abstain from using the wood of any tree struck by lightning. Only diviners or herbalists may use such wood or parts of the tree which they may require to prepare the necessary decoctions for warding off the dangers of lightning. Needless to say any animal killed by lightning would not be touched by the natives, much less eaten, in spite of the fact that they are inordinately fond of flesh diet, and will ordinarily eat even putrid meat.

A METHOD OF BEAD-MAKING IN ASHANTI. By G. E. Sinclair, Administrative Service, Gold Coast. Illustrated.

111 In MAN, 1937, 115, appeared an account of bead-making to which the following description of an alternative process may serve as a supplement. The writer watched this process of manufacture in July, 1937, at Goaso, a village in the Ashanti forest 86 miles west of Kumasi.



FIG. 1.—BEAD-MAKING IN ASHANTI.

The mould (Fig. 1, top) is made of coarse red clay (*buc*) and later covered with a slip of fine white clay (*hyire*). The groove, running the length of the mould, has a diameter of about $2/5$ inch and is straight. Other moulds were built on a slight curve.

The powdered glass, of various colours, used for the process was bought in packets from stores in Kumasi; but the bead-maker, an Ashanti, stated that in old times bottles were ground down to serve this purpose. Whether the Ashanti knew the process of making glass is uncertain. The Nupé of Northern Nigeria make their own glass, but the writer has as yet no evidence of people nearer Ashanti who do this.

The process.—The glass powder of various colours is poured into separate pans. The mould is taken in the left hand and a piece of trimmed snail shell (Fig. 1, below) in the right hand. The shell is held between the thumb and second finger while the index finger is left free. A scoop

of powdered glass is now taken into the shell and with the aid of the index finger tapped gently into the groove of the mould to form an even layer. This layer is then packed and smoothed with an evenly-trimmed feather, with which any stray granules are brushed away. Further layers of different colours are added in varying depths till the groove is filled and the powder is level with the top of the mould.

The stalk of a cassava leaf is now cut to the length of the mould, straightened and covered with a slip of moist white clay (*hyire*). This stalk is now pressed lightly into the surface of the powdered glass and covered with further layers of powdered glass till a cane is completed, one half section lying in the groove, and the other half being raised above the mould. Great skill is needed in adding the final narrow strip of powder to complete the dome of the cane.

The fully charged mould is now taken in a long pair of tongs and placed in a bed of burning charcoal over which is built a wooden furnace. The furnace is made from four logs enclosing the charcoal bed in a square, and smaller logs which are fitted closely over the top, leaving only small draught vents at two opposite ends of the square.

The bead-makers then take fans of hide or woven palm-leaf and, fanning, make a gentle draught play on the vents of the furnace. Gradually this draught is increased until the heat of the furnace makes near approach impossible. When the firing is finished the glowing mould is removed from the furnace in long iron tongs and the fused glass cane levered from the mould with a knife. With the knife the bead-maker with sawing movements makes slight cuts at regular intervals along the cane and snaps off the lengths thus formed. The cassava stick in the middle of the glass has been carbonized and a hole has been left.

The glass of the beads thus formed is opaque and—unlike the beads described in MAN, 1937, 115—almost completely fused. The beads are still rough and are smoothed on a grooved stone before they are ready for stringing.

This process of bead-manufacture, the source of which is as yet unknown to the writer, is common in this part of Ashanti, and the beads, which are worn round the waist or below the knee, find a ready market.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Archæology in Peru: Recent Progress. Summary
112 of Presidential Address by H. J. Braunholtz.
 27 June, 1939.¹

Apart from the work of Sir Clements Markham and of Mr. T. A. Joyce, Past President of the Institute, in his textbook on "South American Archaeology," published in 1912, the serious study of Peruvian Antiquities has been somewhat unaccountably neglected in this country. In spite of the richness of the remains, their intrinsic interest and excellent state of preservation in ideal conditions in the arid coastal region, no British archaeological expeditions have yet been undertaken in Peru. Much interest is, however, shown in Museum collections, and it is the more regrettable that they are generally lacking in adequate scientific documentation. The extensive cemeteries have been subjected to continuous depredations by the 'huaqueros' for four centuries, and the stone monuments have often been used as stone quarries for post-conquest buildings; nevertheless vast unspoiled fields still await systematic investigation.

The principal culture centres of the highlands—Tiahuanaco, Chavin and Cuzco—and of the Coast in the regions of Chimú, Lima, and Nazca, were briefly mentioned; and the excavations of Reiss and Stübel at Ancon, and those of Max Uhle at Pachacamac and Moche, which first established the sequence of cultures on a scientific basis, were described by the lecturer. Dr. Kroeber's valuable field expeditions in 1925 and 1926, and his classification of the Uhle collections in American Museums, have confirmed Uhle's scheme in the main, but have added many local modifications and elaborations to it. But the antecedents of the earliest and finest cultures such as the Early Chimú ('Proto-Chimú' or 'Mochica') and the Early Nazca ('Proto-Nazca') are still unknown.

Dr. J. Tello's intensive field work, particularly in the Chavin Region and at Paracas, has led him to the view that the Coast cultures were to some extent derived from the Highlands, and to other disagreements with the Uhle-Kroeber scheme. He regards the 'Archaic Andean' as the earliest which extended throughout the Highlands of Peru.

Dr. H. U. Doering has contributed important results, not yet fully published, by his expedition in the Nazca Valley in 1931-32, and his excavations at Pacatnamú (or 'La Barranca') at the mouth of the Jequetepeque river in the extreme north, in the last two years. Here he has found superimposed burials, the older of which he regards as having 'Early Chimú' affinities.

Turning to the highlands, the Tiahuanaco cultures are generally recognized as being considerably pre-Inca, though some overlapping is not impossible; Posnansky would ascribe a much greater antiquity to Tiahuanaco, mainly on astronomical grounds, but this hypothesis finds little favour

among archæologists, and conflicts with the ceramic evidence on the coast. The cyclopean buildings of the Cuzco region have been supposed by some archæologists, including Markham, and, tentatively, Joyce, to belong to a pre-Inca megalithic epoch. A detailed study of the masonry, in which cyclopean, megalithic and ashlar styles are often intimately blended, now makes it difficult to sustain this view. Hiram Bingham's revelation of the city of Machu Picchu (1911-1915), in the Urumba Valley north of Cuzco, provides good evidence of this blending of styles, and the pottery found there is typically Inca.

In 1933, the fourth centenary of the foundation of Spanish Cuzco, the Peruvian Government established an Archaeological Institute at Cuzco, and inaugurated an extensive programme of operations for clearing, restoring and excavating the ruins of the Cuzco region, as well as farther afield. Among the more important sites investigated and restored are Sacsahuaman, Tampu Machay, Pisac, and Ollantaytambo, and illustrated reports of the work in progress have been published by Dr. L. Valcarcel and others in the "Revista del Museo Nacional" of Lima.

Hitherto unknown buildings, including a great circular reservoir, have been revealed above the citadel of Sacsahuaman, and much pottery and other artefacts have been excavated. The general conclusion reached by Valcarcel is that all the architecture is purely Inca, that the Inca used different styles of masonry for different purposes, and often combined two or more styles in the same building. The pottery found is almost without exception of characteristic Inca types. Another result has been to confirm the account of Sacsahuaman given by Garcilaso de la Vega, and to restore his reputation as a credible authority.

Radiophotography has recently been applied to the study of the coastal pottery by Mr. A. Digby and Dr. H. J. Plenderleith at the British Museum. Interesting results regarding the technique of handle and spout attachments have been revealed, which may prove of value for classifying and dating certain wares, and showing the spread of influences from one region to another.

Air photography has also been used in recent years for archæological survey, and the 'great walls' of Peru flanking the Santa River were discovered and plotted by these means in 1932.

Dr. Valcarcel has recently appealed in his journal for international co-operation in the excavations, for which local resources are inadequate. It is to be hoped that British field archæologists may give some attention to the Peruvian area in the future, and that the study of American antiquities in this country may be encouraged and placed on a sounder basis by the establishment of special Departments for the subject in some of our Universities and Museums. Only by such means will it be possible to keep abreast of recent research, and to gain a just appreciation of the American Indians' cultural

¹ Many of the illustrations of architecture were from photographs recently presented to the British Museum by Mr. Bennet Greig, British Consul in Lima.

achievements in comparison with those of the old world.
H. J. BRAUNHOLTZ.

Anthropological Research in West China. By David
113 *Crockett Graham, Local Correspondent.*

During the summer and early fall of 1938 there has been much anthropological research in West China, most of it done by Chinese scholars.

Madame David-Neel and her adopted Tibetan son, Lama Yong-den, are living in a monastery in Tatsienlu where Madame David-Neel is completing a new book on Tibetan Lamaism.

Baron Egon von Eickstedt, Professor of Anthropology in the University of Breslau, spent part of July and August in Chengtu: he took some physical measurements, but because of the war he was unable to do as much as he had hoped.

Professor H. I. Feng, Ph.D., a graduate of the University of Pennsylvania and of Harvard University, and now Professor of Anthropology in Szechwan University, has been studying the language and customs of the Ch'iang people, continuing a research project begun by teachers of Szechwan University a year ago.

Mr. Chuang Hsueh Pen, a representative of the Academia Sinica, is still doing research in the Si-Kang region, mostly near Tatsienlu. He has published a small book on the customs of the Ch'iang and the Jia Rung.

In the Province of Kansu an ethnological research party expects to continue at work at least one year. In this party is Professor Li An-che, a graduate of Yale and Columbia Universities, recently instructor in Yenching University, Peiping; Professor J. B. Taylor, of Peiping; and J. K. Tao, of the Geological Survey, Peiping.

The University of Nanking, which is now located in Chengtu, has sent out several research parties.

One went to Tatsienlu, Tao Fu, Kanze, and beyond, to survey the social, economic, political, religious, educational and ethnological conditions of the Si-Kang region. A preliminary survey has been completed, and further studies are to be pursued. The chairman of the expedition, Professor S. F. Klo, Docteur des Lettres of the University of Lyons, has published articles on sociology in China, and was Vice-President of the China Sociology Society in 1937. With him were Professor Tsu-Ih-tang, Docteur des Lettres from the University of Paris, who is Professor of Ethnology in Nanking University, and Research Fellow of the Institute of Chinese Studies, University of Nanking; and others.

The University of Nanking also sent a photographic expedition to record the life and customs of the Lolo tribes in co-operation with the Ministry of Education of Szechwan Province.

The Institute of Chinese Cultural Studies of the University of Nanking sent an expedition to different parts of the Province to study stone carvings (especially of the Han dynasty), monuments and tombs, Buddhist sculpture, memorial tablets, etc., bricks and decorative designs of the Han dynasty, frescoes, and the pottery of the Ch'ung Chou kiln. The director is Dr. T. L. Tsu; with him are Mr. Li Siao-yuen, of the Columbia University, and Mr. Shan Chen-tsu, who has been a professor in Sun Yat-sen University, Canton, in the National Teachers' College, of Peiping University, and in Tsing Hua University. Rubbings and photographs will be taken.

The West China Border Research Society has Vol. IX of its Journal of the Society in the press in Shanghai, and the materials for Vol. X are in hand. Eight lectures are announced for the year 1938-9 and at the Annual Meeting the President, Mr. R. A. Peterson, will speak on *The Changing Geography of Disease in Szechwan*.

OBITUARY.

Frank Corner, M.R.C.S., L.R.C.P., J.P.: 1862-1939.

114 The death of Dr. Frank Corner at the age of 77 severs another link with the pioneer band of workers who in the last half century have contributed by their field work to the study of human evolution in Britain.

Frank Corner, the son of a medical man in whose footsteps he was to follow, was a student of the London Hospital, and qualified in 1888. Despite the calls of an extensive and busy practice he became attracted by the many discoveries of Pleistocene fossil bones which were being unearthed during building excavations in the urbanization of the then developing Ilford and north-east London district, to the study of paleontology, and its sister sciences geology, archaeology, and anthropology, interests which he sustained, or which, rather, helped to sustain him, until his death.

As a collector of fossil bones, his work at Ightham Fissure, Ilford, Leytonstone, resulted in the discovery of type specimens and in the assemblage of a considerable bulk of valuable material of prime

importance to present-day students. In this con-



nexion he would speak of his association with Benjamin Harrison, E. T. Newton, F. C. Spurrell, Canon Greenway, and a host of others, and also of Mr. M. A. C. Hinton and Mr. A. S. Kennard.

As a collector of flint implements, his range extended from the palaeolithic to the neolithic, nor did it stop there. His appetite for collecting was insatiable. It spread to the Bronze Age and to the Roman Era.

He was the fortunate possessor of an extensive series of crania of the Thames Ballast and Thames Alluvium series, and this part of his collection included the Galley Hill skull and the Baker's Hole skull.

With the advent of the Swanscombe skull, week after week, month after month, found him at the site, helping with his knowledge, cheering with his hearty jokes and reminiscences, and stimulating with his practical and intelligent interest, and it was there we learned to love him. Great-hearted Frank Corner! Laughter was never far away when he was about. Shrewd, hard-bitten, he was yet kind and compassionate to a degree. It was characteristic of the man that he should refer to his own ailment as 'my private gravel-pit,' and that he should greet his fellow-enthusiasts as 'my fellow-sufferers, sufferers from Lithosis.'

"To see a world in a grain of sand

And Heaven in a wild flower,

To hold Eternity in the hand

And live within an hour."

That capacity could be ascribed to Frank Corner.

ALVAN T. MARSTON.

Arthur Maurice Hocart: 1884—March 1939.

115 Arthur Maurice Hocart, M.A., whose death in March, 1939, at the early age of 55, is a very great loss to science, was born in Guernsey and educated in Brussels and at Elizabeth College, Guernsey. He early showed himself to be a fine linguist and classical scholar. From 1902-6 he was Classical scholar of Exeter College, Oxford, and afterwards Senior Scholar of Exeter and Jesus Colleges. After leaving Oxford he followed a course of psychological research at Berlin University. Then, for some years, he worked in the Pacific, for a time in close association with Rivers, with whom he conducted joint researches; and was at one time headmaster of the native school at Lau, Fiji, in which post he showed great originality and achieved marked success in running the school as far as possible in accordance with native custom. In 1912 he obtained a graduate research scholarship from Oxford to investigate Fiji, Rotorua, Wallis Islands, Samoa, and Tonga. He served in France during the war, with the rank of Captain, and was mentioned in despatches. After the war he was appointed Director of Archaeology in Ceylon and, in very difficult circumstances, carried out there many important excavations and much ethnological research, besides making himself master of Sanskrit, Pali, Tamil and Sinhalese. In 1929 he retired on pension owing to ill-health and until his appoint-

ment to the Chair of Sociology in the Egyptian University, Cairo, in 1934, was engaged in writing and lecturing at University College, London, where he worked in close association with the late Prof. G. Elliot Smith and Dr. W. J. Perry. For a time he acted as an Officer of the Royal Anthropological Institute. During the four years he spent in Cairo he was eminently successful as a teacher and lost no time in initiating field research into the social life of the *fellahin* and in training Egyptian students to carry on this work. He visited many parts of Egypt to make comparative studies and his last illness was due to infection while making ethnological enquiries in the Fayoum. Hocart was immensely popular among his colleagues at the Egyptian University and his students were devoted to him.

This varied career in many parts of the world gave Hocart wide knowledge of many languages and cultures and both directed his interests towards comparative studies and provided him with the material to make them. He was a prolific writer, though always a careful one, and in his last ten years produced several books of first-rate importance: *Kingship* (1927), *Lau Islands* (1929), *The Progress of Man* (1933) and *Kings and Councillors* (1936), being among the more significant of his writings. He was a frequent contributor to the *J.R.A.I.* and to *MAN*. Hocart's originality did not commend his theories to a very large body of students, but even those who most strongly disagree with them are forced to acknowledge their brilliance.

Here is not the place to extol the character of a genial and courageous friend, but a short tribute may be paid to the virtues of a scholar. Hocart was the ideal type of scholar. He bore profound learning lightly and was always as much at home talking to unlettered folk as to his colleagues, and his courtesy and charm easily won him friends among both. He did not acquire knowledge to advance himself, but because he had the true scientist's craving to understand the causes of things. He had a very clear understanding of the methodology of science and the place of theory in research. As important as his writings was his personal example. All who knew Hocart were struck at once with his entire freedom from any kind of pretentiousness, a quality he detested, and with his intellectual integrity and independence. In his writings he was unbiased by personal considerations and allowed himself to be guided solely by the facts. He was always a courageous and straightforward critic of what he considered slovenly and pretentious work.

Hocart married Elizabeth Graham Hearn in 1930 and the last years of his life were very happy. Owing to her training Mrs. Hocart was well able to participate in her husband's interests; her encouragement and devotion inspired him in his work. The cultured quiet of their home in Cairo was a haven to all in Egypt who value science and scholarship.

E. E. EVANS-PRITCHARD.

REVIEWS

AFRICA.

Niger Ibos. By G. T. Basden, O.B.E., D.Litt. London (Seeley Service), 1937, 442 pp., with Glossary and Map. Price 21s.

116 Forty years of growingly intimate contacts among one of the largest homogeneous groups in Africa have gone into this book, which is, I should think, the best supplied with first-hand material of all so far issued in this publisher's series. Dr. Basden is unfortunate in that his material is not here accompanied by an Index worthy of it. This is a real handicap to all who go to his pages for information regarding an African habit, custom or point of view, in the course of some wider-than-Ibo study.

To make one book of the vast mass of notes accumulated during forty years must inevitably result in a volume of just such a form as this has taken. It may well be that the division of the material into XXXIII chapters and the giving of appropriate titles to them has suggested that a fuller index was not necessary. Actually, the result is that while a general reader will luxuriate uncomplainingly among vast riches of novelty and surprise, the men and women who are carrying—or are preparing to carry—responsibility in administration or mission service in S. Nigeria and who turn at once to this book for information and aid, will be less well catered for.

I have one private disappointment also, which I mention as preliminary to an expression of gratitude which will offset, I hope, the apparently critical opening of this review; which, after all, is directed more against the limitations inseparable from any single-volume treatment of such richness, than against the material itself. Dr. Basden quotes me (p. 35) in connexion with a protest which both Dr. Driberg and I have attempted against our continued use of the phrases 'ancestor-worship' or 'religion' in reference to the animist's 'ceremonials of consultation' or of 'conference' with his forebears. But he does not carry the quotation far enough to show that our antithesis is not between 'worship' and 'religion,' but between the old point of view, in which both these words belong equally to an erroneous category, and a new point of view, in which what was once held to be 'religious' and 'worshipful' is now held to belong to a technique of 'conclave' or 'consultation' within the continuing and imperishable clan.

This seems to me important, since far the most interesting thing in this wonderful record of a white man's experiences 'far ben' in black man's thought is the story of how these Ibos have moved out from the straightforward ancestralism that some of us have lived amongst elsewhere in Africa. The story speaks from these pages, but is not told in them. I have always held that the only effective Christian approach to the ancestralist is through the announcing of the 'Larger Family.' As he is, he has a perfect circle of belief covering the present and the future life equally. A 'sense of need' is absent, unless and until he hears of the Larger Family; the 'other sheep,' the 'one flock and the One Shepherd.' When that dawns, ancestralism becomes inadequate.

It seems apparent that the Ibos, through historical intermixing of earlier and simpler human groups, had moved out from the old securities of continuing conclave and consultation with ancestral advisers who were adequate into a realization of the wider human picture. And with this movement out beyond the hitherto impregnable position, which had the ancestors at its centre, had come the first ideas of deeper need which had produced the figures of 'gods'; the Somebodies required

by a world-view too large for little local ancestors to cope with.

With this idea as a clue, I think that Dr. Basden's material may prove of greater importance than he himself is willing to claim for it. He goes out of his way to assert the almost 'dead and gone' uselessness of the ancient culture and its manifestations. He says that his book is "concerned with the Ibo people as they were; not as they are to-day" (Intro. p. xviii). But his whole picture is of a people who, not despite but because of their medley of deities, were already on the move in theology; and moving in a direction where their path and ours were bound to meet. Polytheism does not exist until the need for a *Theos* has been felt. Once the desperately difficult implications of the Larger Family outlook have been recognized and accepted, the Christian *Theos* takes over, not merely from the old ancestors, but from all the 'lesser gods' as well.

One could wish that the sections of this book which deal with 'religion' could be separately issued at a small price; after re-treatment appropriate to the special purpose of showing a people theologically on the move. With Dr. Basden's own chapter on *Similarities between the Israelites and the Ibos*, and Father J. J. William's book on the same subject, to provide a starting point, the re-treatment ought not to be difficult. CULLEN YOUNG.

Bantu Beliefs and Magic. By C. W. Hobley, C.M.G. Introduction by Sir James Frazer, O.M. 2nd edition, enlarged. London: Witherby, 1938. Price 15s.

117 Two small criticisms for a start. The title does not now convey all that is in this book; it covers little more than half of it; and, secondly, for what is a reprint (not a 'revised' edition, as the publishers state), plus 50 pages of new material and one new illustration, the price seems unduly high.

From the strictly anthropological or ethnographic point of view the book is as it was in 1922. It was then so accurate that revision, strictly speaking, was not needed; but one hoped for expansion. Therefore, in a book so well known comment to-day seems hardly called for. But for those who have missed it, it may be stated that it contains accurate and valuable data about the beliefs and magic, and sacrifice, harvest and planting, circumcision, death and burial, curses and superstitions of the Kikuyu and Kamba in Kenya, with an excellent section (Part III) on Laws, Councils, Tribal organization, legends and dances, concluding with a chapter on East Africa after the war. It is at this point that Mr. Hobley has added Part IV and one may express a regret that, since he has been unable to revisit Kenya to revise and expand Parts I and II and most of III, he did not give himself more rein and expand the end of Part III and all Part IV by themselves into a new book. Here his knowledge, his experience and his perspective give a scope for something much fuller, but within his chosen limits he gives us a first-rate introduction to Africa passing and Africa growing, and a valuable corrective to many loosely made charges and statements.

He is a sincere, level-headed and judicial writer, and one may search for long without finding a handbook showing more insight. If the advanced student feels unsatisfied because, both in the old parts and the new, he wants more, the less advanced can tackle this work with assurance.

The new section is headed "Quo Vadis?" which gives a clue to its contents. That query is what puzzles and

disturbs so many of us 'old Africans.' In an earlier chapter Mr. Hobley says his research was probably tedious to his native informants. Personally I found there was nothing they loved better than being asked about themselves, their beliefs and ideas, provided it were done (as, of course, Mr. Hobley did it) sympathetically; and in one province ten years after I left an old chief said to one of my successors: "Nobody has cared about what we think since Mr. Melland was here until 'you came.' Would not that query 'Quo Vadis?' be less pregnant of alarm if we would consult more with the natives as to what they think of this or that, and find out from them the flaws in our ideas? We are admittedly groping, but we need not grope blindfold. It would be well worth while for us and, above all, for them; and, at any rate from the Government point of view, we are there to help them and not merely to experiment with them.

F. H. MELLAND.

Science in Africa. By E. B. Worthington, M.A., Ph.D. O.P. 1938. Price 10s. 6d.

118 The application of the fruits of man's researches to the control of the forces of nature in primitive environment must have a wide appeal to the general reader and more particularly to those who are interested in and responsible for our Colonial Empire and other native areas.

In a work covering so wide a field subdivision has naturally been found necessary, and Dr. Worthington has selected various branches of science as chapter headings. Since Dr. Worthington is responsible for them all, a criticism based on samples will be a fair one.

In chapters V, XI, XII, XIII, XIV, dealing with the processes by which man obtains his sustenance out of the soil Dr. Worthington disagrees with the separation of animal husbandry from agriculture, so often attempted by anthropologists; agriculture means the raising of crops and of stock; farming in its widest sense and mixed farming is the ideal. The division into native subsistence agriculture, cash crops, and non-native agriculture is good. These three categories overlap and will tend to do so more and more, but if we think of them in terms of native knowledge—what the native knew without European contact, what he has acquired, and what he has yet to acquire—the divisions become fairly well defined.

Anthropologists will be interested in the plain statement that 'the principal factor retarding native agricultural improvement is a lack of balanced knowledge concerning the conditions of native life . . . before 'native agriculture is improved, we must have a sound 'knowledge of existing conditions.' Dr. Worthington evidently does not feel that the expedition of the future should depend upon a body of experts, each a specialist in his own faculty but untrained in anthropology. The co-ordination of these individual studies and their interpretation in terms of native culture is more than one can expect from any specialist, and the opening of Ch. XVIII makes it clear that this analysis of the everyday institutions of native life, and the eventual picture of the whole culture, is work for the anthropologist.

There are interesting allusions to the native practice of shifting cultivation and mixed cropping, and references to improvements in native agriculture by green manuring, rotations, composting, and mixed farming; not new but gathered in convenient form for reference and supplemented by a most valuable bibliography and by details of organized research in the various regions.

Chapters XV-XVII on health and human diseases are of great importance and give a good view of the present situation, but the last part of Ch. XVIII, on Social Anthropology, gives little but a review of literature.

This is a valuable contribution to colonial administration, anthropology, and applied science generally, and a desirable companion-volume to Lord Hailey's monumental *Survey of Africa*. G. P. L. MILES.

Anthologia Anthropologica: The Native Races of Africa and Madagascar. By Sir James

119 Frazer, O.M., F.R.S., F.B.A.: edited by R. E. Downie. London, 1938. 578 pp. Price 35s.

The *Anthologia* is planned on the scale that characterizes all Sir James Frazer's work; the present volume is the first of five.

There are ample margins, good spacing, and the printing is excellent. The eight sketch maps are clear and precise. Tribal names are printed in red. Of the seven books, six are allotted to Africa and one to Madagascar. There is a good index which also acts as bibliography.

Mr. Downie has compiled and arranged the extracts, with care and devotion. On pp. 14-15 the extracts from *Asia Portuguesa* could have been omitted, as their content is reproduced almost word for word in the extract from Theal on pp. 15 and 16. This extract from Theal on Sofala and Monomotapa is one of the few previously used (e.g., in *Golden Bough*, 3rd Ed., I, p. 392); otherwise most of the excerpts conform with the advertisement "that very little—practically none—of the material in this work has been used by Sir James 'Frazer in his published writings.'"

For over fifty years, Sir James' patient industry has culled the most valuable passages from the literature on primitive races in Africa. One is amazed that he has yet so much untouched material. The anthropological world will be most appreciative of this garnered lore.

An anthology can never satisfy all tastes. Economics and material culture bulk but little in the extracts, while those that deal with the divinity that hedges about a king are prominent. It is seldom possible to read everything published on a subject, and many publications fail to reach an authoritative standard; yet regret is felt that there is nothing from Emil Torday on the Congo; from Meek on Northern Nigeria; nor from MacMichael on the Sudan. Sir James has sifted the wheat from the chaff, and where he has not quoted verbatim he has condensed into his own words such parts as interest him. The verbatim extracts include publications in French and German; English translations would have lengthened the volume, but it might have gained in usefulness if these passages had been replaced by translations. M. Y. W. JEFFREYS.

The Land of Egypt. By Robin Fedden. Photographs

120 by A. Costa and others. London: Batsford, 1939. viii + 120 pp., with coloured frontispiece, many photographs and sketch maps. Price 12s. 6d. net.

This is a pleasant note-book of things Egyptian, old and new, by an observant and well-informed traveller. It is an excellent introduction and summary, to be read before going to the country, and on return. The photographs are admirable, and many of them unusual; they range as far as Sinai and Nubia. J. L. M.

Face au Royaume Hamite du Ruanda, le Royaume

121 *Frère de l'Urundi.* Par Mgr. Gorju et ses missionnaires. Illustrations. Map. Brussels, 1938.

Mgr. Gorju and his colleagues present a mosaic of their researches into the Hamitic origin of the dynastic kings of Ruanda-Urundi. The compiler of the notes explains that "it is perhaps too early [to publish results] but 'to-morrow it will be too late.' The work consists of

three Parts. Part I comprises a short historical essay on the date of the entrance of the Batutsi into Urundi, with an account of the origin of the kings; and also a *résumé* of the comparisons drawn between the national customs of Ruanda and Urundi, regarding the death and survival of the king, and the Muganuro, feast of the first-fruits or sorghum. Part II gives the legendary origin of the Batutsi of Urundi; the noble and non-noble tribes; the marriages of kings, princes and princesses; misalliances; the code of pastoral usages at the court of the king. Part III consists mainly of further historical data. The Bantu seem to be known as Bahutu, in contradistinction to the Batutsi of Hamitic origin.

The reader was interested in the similarity of some of the customs described with those which obtained in some S. African tribes. The Nguni were accustomed to sow up the body of the king in a black ox-hide; so also did some sections of the S. Rhodesian tribes.

The Vandau of S. Rhodesia and P. E. Africa believed that the king continued his royal life after death in the form of a lion (cf. p. 40). The language also reminds one of Chindau. As the Vandau state that they are an offshoot of the Barotse (only the very old remember this), one is led to suppose that the culture of the latter is also derived from farther north. E. D. EARTHY.

African Mirage. By G. Hoyningen-Huene. London: B. T. Batsford, Ltd., 1938. 144 pp. Price 12s. 6d.

I found it difficult to understand why such a word as 'mirage' should be chosen for the title of this photographic collection till I reached p. 53; practically half-way through the book. At this point the author has reached Victoria Nyanza and has interviewed Lutembe, the famous tame crocodile, in his oozy haunt some thirteen miles from Kampala. He then proceeds—

"Besides Lutembe, Kampala has a king in his palace, a few missionaries, a few prostitutes, and Barclay's Bank . . ."

and I realized how appropriate the book's title was. I understand that in mirage all objects are reflected upside down, and even then, when one approaches for a closer view, one finds that they are not there! In fairness to the author, however, it should be stated that he closes his brief preface with the words, "Those who wish to undertake a similar journey will see for themselves what my incompetent pen and 'impromptu' photography have attempted to convey." That, fortunately, is true.

Fortunately, too, the camera was a perfectly normal one, of excellent quality. Its specification, indeed, is carefully given. The result is a valuable portfolio of pictures. The route followed the Nile to Uganda; thence to Nairobi and the Kikuyu country; then back to Uganda before crossing into Belgian Congo by Lake Edward and Irumu to Stanleyville. Then northwards

across the Welle into French Kamerun and on to Lake Chad; west to Kano, and then north again by the desert route to the Mediterranean at Algiers. The author's description of his pictures as "impromptu" is much too humble. A large proportion of them are of great merit, not simply as photographic art but as permanent human record. CULLEN YOUNG.

Bushmen of the Southern Kalahari. Reprinted from 'Bantu Studies,' X, 4, XI, 3, with additional matter. Edited by J. D. Rheinallt Jones and C. M. Doke. Johannesburg: Witwatersrand University Press.

The volume gives the results obtained by members of a University expedition which in 1936 studied some seventy Bushmen assembled by Mr. Donald Bain, the well-known big-game hunter, at his camp, Tweerivieren. Results of the highest importance were obtained, and the volume is an indispensable book of reference.

The first essay is devoted to the musical practices, the instruments played, and the tunes produced. It appears that some of the girls were acquainted with a number of European songs. This in no way detracts from the importance of their special instruments and the music obtained. An outline follows of *Khomani* Bushmen phonetics, of their games, plays and dances. The women and girls were skilful in imitating animals, especially tortoises; "their legs are doubled up and folded behind, and they waddle along, one after the other, on fists and knees, leaving a trail not unlike that left by the 'tortoise.'" Some of these games seem definitely to have a meaning, and it would be interesting to see whether the published 'Bushman' rock-shelter paintings of S. Africa depict human activities which occur in these games and dances. For instance, Miss Tongue reproduces, from near Dordrecht, a semi-circular group of figures depicting a man being progressively changed into a frog. Some of these doings might help with the old problem of dating rock-paintings. The next articles deal with the hut-distribution, genealogy and homogeneity of the people, and their physical characteristics, with elaborate tables. A short note on finger-mutilation is of interest to pre-historians: the operation was only performed on very young children, when suffering from some serious illness, but was in no way a tribal mark. Then come notes on the *Tsamma* and its uses, the grammar of the *Auni* language, and a vocabulary, and an account of the arrow poison employed by the *Auni*. Laboratory experiments were undertaken, and results of chemical and biological tests are given. Other articles contain notes on health and disease among the Bushmen of the Southern Kalahari, the *Khomani* dialect, its morphology and other characteristics, and the weapons still in use.

An immense number of facts have been set down clearly and concisely, and are now available in handy form.

M. C. B.

ANCIENT EGYPT.

The Sky Religion in Egypt, its antiquity and effects. By G. A. Wainwright, B.Litt. Cambridge, University Press, 1938. xi+121 pp., index. Price 8s. 6d.

The 'sky religion' of the title is not, as the reader might expect, the 'sun-cult' familiar to us in Egypt but a much earlier religious development which the author has deduced from ancient texts and, even more, from Greek sources, all of which he has sought out with his usual industry, backed by long experience in things of ancient Egypt. He has been strongly attracted, as he says, by Dr. Margaret Murray's study of witchcraft as a survival of a past religion, and conceived the idea

that some similar discovery might be made in ancient Egypt wherewith, perhaps, to solve some of the difficult problems with which its religion abounds.

The result is a very novel presentation of some of the gods and of certain historical or quasi-historical events. We are taken back thousands of years before history to a time when the Nile valley did not exist or at least was not habitable, but Egypt was still in the Pluvial Age and depended for prosperity on rain; Seth was then its patron-deity, god of rain and weather. That age passed and the land became, as the author puts it, "high desert," while the Nile valley had become habitable, with its river as source of all good things. Thither

the people went and Osiris, the Flood-god, became eventually the chief deity and consequently a rival of the primeval god Seth. Hence arose the fierce antagonism which formed so prominent a feature in Egyptian mythology and hence also the position of honour sometimes accorded to Seth in the texts, which, though at first sight illogical, is but a relic of his early supremacy.

The rain-god's chief agent on earth was the king, who was accordingly the mighty rain-maker, endowed with divine powers; he was thus the supreme mainstay of the country so long as he retained his full physical powers, but when they showed the least signs of failing he was put to death, probably by his successor and possibly by burning. Ways of escape were, however, sometimes devised and one that survived into historical times was the *sed* festival (or rather 'ceremony') which the author believes to have been practised under the archaic Seth-régime. This régime fell so cruelly on kings that, though long after the settlement in the Nile valley, they turned to the Solar cult which did not require of them an early sacrificial death, as did the cult of Seth.

Sun-worship thus became the royal cult. The process of change was long and slow and under Perabsen, of the Second Dynasty, a return was made to the Seth-cult; but his successor, Khasekhemui, declared himself follower not of Seth alone but also of Horus, who was, in the author's belief, a sky-god representing the clear bright heaven. Thereafter the sun-cult made headway, culminating with Kings Khufu and Khephren; the old gods disappeared, with only two exceptions, Seth and Min, the ancient god of procreation, though Ammon might perhaps claim a place in the sky, since he was a manifestation of Min. The quarrel of Seth and Horus was that of the rain-making storm-god with him of the clear unclouded sky.

Regarding the survival of Seth as a god into the later form of religion, it has long been clear that on the replacement of an ancient religious system by another, some of its chief elements will survive the change, taking new forms, of which a well-known instance is that of local gods ('Lords' or *Ba'alim*) whose place was taken in Islam by *awliya* and in Christendom by 'saints,' while Christian theologians, not denying the existence of heathen gods, classed them, at least as late as the sixteenth century, as 'devils.' But it is venturesome indeed to carry back such an element in Egypt to pre-Nile conditions, practically palaeolithic; materially, the gap in time between that age and the Egypt we know is, in terms of human life, enormous, measurable only by the vague scale of geological time, while, in the matter of religion, domesticated cattle and agriculture were unknown to palaeolithic man and cannot have formed a nucleus round which could crystallize such ideas as the 'Bull of the Sky' or a storm-god as source of the country's prosperity. Besides these general considerations, particular objections may be found in details; an important one is the author's claim that the culture found by Miss Caton-Thompson in the Fayoum, with that of Merimdeh-Beni Salameh, and the Tasian and Badarian, belonged to the Seth period of the 'high desert,' whereas the first flourished on agriculture beside the mud-flats round Lake Moeris, which was then at a high level, and the others were Nilotic.

On the author's views of Seth's origin it must be said that he is in strong disagreement with recent authorities who consider Seth to have been the divine head of a tribe or district in prehistoric times, equal once to Horus, who was another such chief, but antagonistic (see MAN, XXXVII, No. 186, pp. 155-6). It may be added that in chap. 39 of the so-called 'Book of the Dead' Seth has the actual title of storm-god, but is shown as a kindly

deity, equal to the sun-god in his office of protecting the dead man who, by the charm which composed this chapter, identified himself with the god and thus, acquiring his virtues, could defend himself against the hostile fiends who lay in wait for him on his passage to the Afterworld—a method of magic much practised in ancient Egypt.

The Osirian cult is placed by the author even later than the Solar, in agreement with those scholars who found their opinion on the absence of traces of Osiris before the Pyramid Texts and the comparative rarity of them in the earlier parts of the texts. But those texts, as all authorities agree, simply put into writing the oral funerary ritual used through many generations before they were recorded in script; they were edited by ministers of the Solar cult at its apogee, who naturally restricted the non-solar Osirian element as closely as they could; the later portions of the Texts are less constrictive and Osiris has a larger share in them.

In the Appendix, which is intended for the more specialized student, the author points out that the sun is regarded by the Egyptian in no kind manner—as anyone who knows the people can testify; it is not recognized as the source of fertility, for that is, for them, most palpably the Nile. He also utters a well-placed warning against erroneous impressions obtained from "the vague 'statements of syncretizing classical writers,' but nevertheless makes much use of them in working out the details on which his inferences are based. For example, in his equation of Nitocris with the courtesan Rhodopis (pp. 43-4) he relies on the later classical authors but neglects the warning of the earlier Herodotus (II, 134-5). This is one of several similar instances, often of rather hazardous tenuity, while in others a text is strained to yield a meaning adaptable to the theory in hand, such as the idea, drawn from Plutarch ('On Isis and Osiris,' sec. 73), that Seth and his animals "Were accountable 'for the health of the people and a proper supply of 'water for their crops,' whereas Plutarch simply stated that in case of drought or pestilence, if Seth did not yield to persuasion, his animals would be killed—a sequence natural enough for Plutarch, for whom Seth was always the satanic enemy of the people and their gods. We might further add that Plutarch is too often a dubious witness, obsessed as he was with a muddle of late Hellenistic ideas about gods and their 'mysteries,' mostly of Oriental origins.

A great advantage is to be noted in the author's knowledge of original texts, the lack of which has so often led to wrong interpretations in Egyptian matters, such, for example, as the statement that the priests of Thebes conducted a regular ritual to keep the sun safe in the sky, whereas the original text was in fact a charm to enable the deceased, by identifying himself with the sun-god in the manner described above, to overcome his foes just as Rê had overcome his monstrous snake-enemy 'Apepi.

The book is full of varied learning, culled from long studies, and it has the great value of drawing attention to the really considerable part played by the stars and constellations in Egyptian theology, a part which has been largely neglected, owing, doubtless, to the predominance of Rê, the Sun, in a literature which was nearly all written or controlled by the ministers of the Solar cult. The reader, whether agreeing or not with its conclusions, will find in their development much material for thought.

G. D. HORNBLLOWER.

The Making of Egypt. By Sir Flinders Petrie: London. 1939. ii + 188 pp., pls. lxxvii. Price 12s. 6d.

125 The object of this latest work of the doyen of field-archæologists is, to exhibit "unrolled the "most complete and continuous history of a great

"civilization from the flint age to the ages of highly organized culture," with the concluding remark that each successive culture was due to intermixtures with an alien civilization. . . . The uniform result is that Egypt never originated any new civilisation, but was a fertile ground for implanting the products of other lands." (p. 161.)

This is indeed a vast object, difficult to realize in 106 pages of print, which allow for little more than the labelling of periods and their cultures in accordance with the theories of the author, with some of the occasional remarks, often penetrating or at least ingenious, for which he is renowned.

The plan stretches very far, beginning with the Solutreans, from the regions round Hungary, with whom the author equates the very early settlers on the shores of the old lake in the Fayum, continuing with colonizations from Libya, then from a mountainous district in the eastern desert—difficult to envisage—and, to end the predynastic series, Amorites or Syrians. We are then brought to the "Dynastic Invaders" whom the author derives from Elam, on the strength of the carved knife-handle from Gebel el 'Araq—made from hippopotamus-ivory, which points to Nilotic origin. The Elamite conquerors are described as having made settlements on the western shores of the Persian Gulf, founding the land of Punt, which the Egyptians regarded as the home of their ancestors and from which came also the 'Pûn,' people who settled in Syria and had the name of Punic or Phoenician.

The features of the various races are discussed and illustrated in an admirable series of plates. Similar attention is given to capital elements of the growing culture—textiles, pottery, writing, with the beginnings of cylindrical seal-amulets, building, the use of metals and so forth, together with such features of religion as funerary offerings and the worship of Osiris, to whom is ascribed the introduction of corn into Egypt.

Developments in art are also recounted and duly illustrated.

The founding of the 3rd Dynasty, in which building in stone began, is attributed to invaders from the Soudan. The 6th Dynasty ended in disaster, caused mainly by foreign invasions from the north, various waves of which occurred in the First Intermediate Period (Dynasties VII to XI), and are connected by the author with the Caspian, Dacian, and Tunisian regions and with the Gallas of Africa, from whom he derives the founders of the 12th Dynasty. The conquest by the Hyksos then follows, their origin being ascribed to Caucasians. Interlarded with these brief historical indications are accounts of artistic activities and of such evidential objects as scarabs, with illustrations carefully selected to exemplify the text.

Similar treatment is accorded to succeeding dynasties, with due notice of religious developments, including the worship of the sun-disk or the introduction of new deities like Anat or Baal from the east, and of new cultural influences such as contact with Aegean lands, first revealed by the author at Tell el 'Amarna. The latest dynasties, Assyrian to Ptolemaic, are allotted little space.

In the matter of dating the author maintains, as if unquestioned, the very early reckoning that he worked out long ago, though it is now abandoned by most authorities, and in many of his interpretations of surviving evidence he is in conflict with present general opinion. It may be considered that some notice of this circumstance is due to the uninformed reader for whom this book is presumably intended, though of course its exceedingly compressed presentation would not allow of full discussion.

The outstanding feature of the book is the wealth and excellence of the illustrations, appropriately chosen; they are really remarkable in view of the moderate price.

G. D. H.

CORRESPONDENCE.

'Mari Lwyd' (Cf. MAN, 1939, 87.)

126 SIR.—If Dr. Mary Williams turns to my paper, 'The Folk-Lore of Glamorganshire' in *The Book of Cardiff* (Oxford University Press, 1937), p. 127, she will find the following statement: "I must add that I cannot accept the recent theory that the name is derived from *Merry Lude*. Such an explanation runs counter to all rules of philology: the Welsh form would surely be *merri-liud*." I see no reason for revising this opinion.

IORWERTH C. PEATE.

Initiation Rites among the Bantu of Kavirondo.

127 SIR.—With reference to the summary of Dr. Gunter Wagner's communication, MAN, 1939, 66, I shall be very interested to know to what tribes Dr. Wagner refers. The Kavirondo District of Kenya Colony is a very large one and it contains a number of different tribes, both Bantu and non-Bantu. I have been well acquainted with it for over twenty years. There is no such thing as a Kavirondo tribe, and any observations on tribes in the Kavirondo District should refer to the particular tribe under observation. The biggest tribe in Kavirondo is the Nilotic Luo, numbering nearly half a million people.

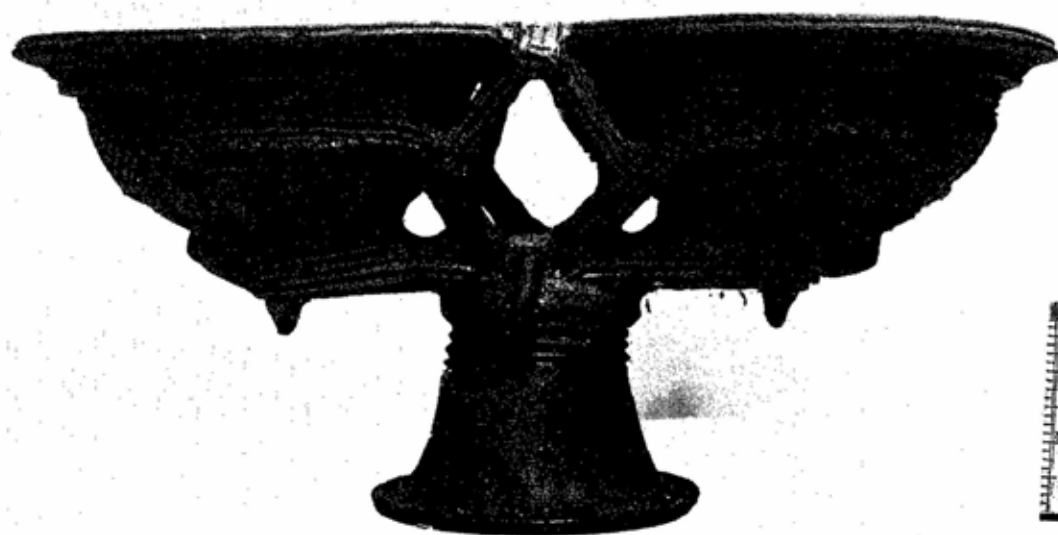
Kitale, Kenya.

H. F. STONEHAM.

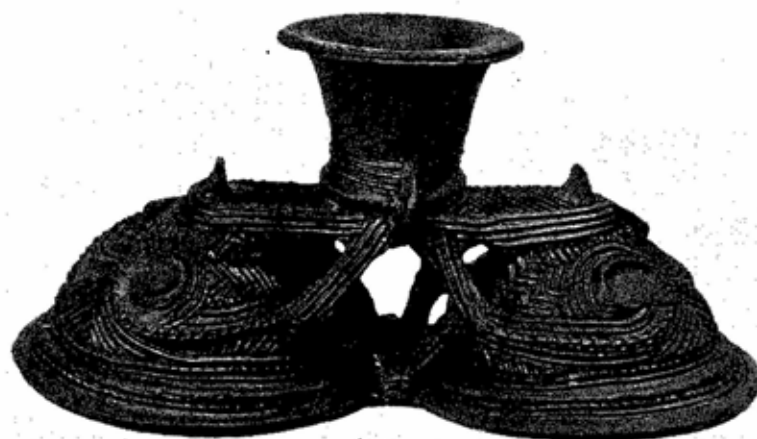
128 SIR.—In reply to Col. Stoneham's enquiry I have pleasure in referring him to my full communication "Initiation Rites among the Bantu of Kavirondo," which will be published in the next issue of the *Journal of the Royal African Society*. In the full communication, where I have given detailed data on the initiation rites, I have, of course, stated to which particular tribes among the Bantu of Kavirondo my various observations refer, viz. to the Vugusu (Kitosh), Idaxo, Isuxa, Tiriki, Logoli, and Nyole. To do so also in the brief summary in MAN seemed to me neither possible nor necessary. Its purpose was merely to state the general results of my investigations, which apply to all Bantu tribes of Kavirondo, and I have, therefore, referred to them jointly by the term "the Bantu of Kavirondo."

Col. Stoneham is, of course, quite right in stating that there is no such thing as a Kavirondo tribe, but then I did not say anything of the sort. By referring in my title to the "Bantu of Kavirondo" I have made it quite clear that I was dealing with the Bantu tribes only, and not with the Luo, Teso, or other non-Bantu tribes of the district. If it is inadmissible to speak of the "Bantu of Kavirondo" because this wording creates the wrong impression that they are one tribe, then it should also be inadmissible to speak of the "Nilo-Hamites of Kenya" or, for that matter, of "The Bantu of South Africa."

GUNTER WAGNER.



1. (120847).



120844



120844

2. (120847) inverted: 3. (120844)

SACRED TWINNED VESSELS FROM THE IGBO TOWNS OF AWKA AND AGULERI, NIGERIA.

Copyright, The Wellcome Historical Medical Museum.

MAN

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ORIGINAL ARTICLES.

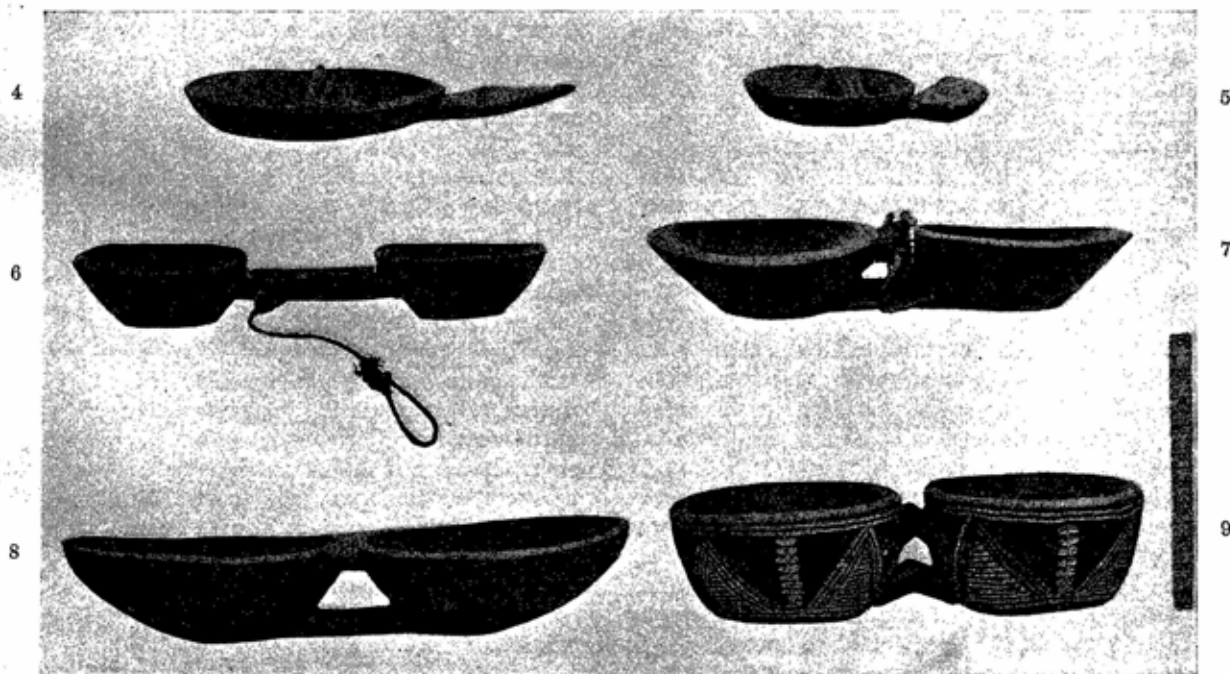
Technology

With Plate I-J.

Jeffreys

SACRED TWINNED VESSELS. *By M. D. W. Jeffreys, Ph.D., London. Illustrated.*

129 The vessels represented in figures 1-9, which have been kindly supplied by the Wellcome Historical Medical Museum, Euston Road, London, were obtained by me in 1930, in the native markets of the Igbo towns of Awka and Aguleri, Nigeria—strongholds of the Umundri culture in the Onitsha Province.



FIGS. 4-9. SACRED TWINNED VESSELS FROM AWKA AND AGULERI, NIGERIA.

The pottery vessel shown upright in Fig. 1 and inverted in Fig. 2 is of interest because of (a) its design, and (b) the decoration. The design suggests that the pottery is based on a wood technique—and the decoration appears to follow that usually adopted here for wood carving. Compare the decoration on the bottom right-hand wooden vessel in Fig. 3, which shows the forms that these vessels may take when carved from wood.

These double vessels, from the religious use to which they are put, may be regarded as a unit combining the Patten and the Chalice. They also exhibit a feature usually associated with sacred vessels, namely, high ornamentation; and are made for sacred rather than for profane use. In them is placed the sacrificial food and oblation of wine when offered to a sky god *Chuku*, to *Alushi*, and to the ancestral spirits *Ndichie*.

In Fig. 3 the vessel No. 120844 shows clearly the distinction between the vessel for food, and that for wine. The larger and unlipped vessel carries the food—usually yam or flesh; the smaller lipped vessel, the palm wine.

The sacred vessels are not common, and with the increasing spread of Christianity are now seldom made. I have collected for the Wellcome Museum a few specimens in the Bamenda Divisions of the British Mandated Territory of the Cameroons. The decoration on the Bamenda specimens is very different from that on the Igbo ones.

Similar twin pottery vessels have been reported from Egypt, and I would welcome any information or references to the occurrence elsewhere of similar vessels.

It is just possible that there is a connexion between the use of sacred twin-vessels and the derivation of the word *grail* or *grail*. One suggested derivation is that *grail* is an abbreviation or abridgement of the word *gradalis*—where *grad* = 'step or division,' and *alis* = 'food,' i.e., a combined or stepped vessel for keeping separate the sacrificial offerings. The two top wooden vessels in Fig. 3 are thus stepped or divided. There are other suggested derivations, but as bread and wine have through the ages been offered to the 'gods' and to ancestors, it is reasonable to assume that special and (thereafter) sacred vessels were used in which to prepare and carry such offerings. To combine the two re-

ceptacles into a single unit would be easy. Baring-Gould commenting on the 'Grail' wrote:—"The Grail is not a sacred Christian vessel, but a mysterious relic of a past heathen rite. . . . The first to adapt the Druidic mystery to Christianity was a British hermit, who wrote a Latin legend on the subject. Helinandus (d. 1227) says: 'At this time (A.D. 720), in Britain, a marvellous vision was shown by an angel to a certain hermit: it was of the basin or paropsis in which the Saviour supped with his disciples; concerning which the history was written by the same hermit, which is called the Gradal.' And he adds 'In French they give the name gradal, or graal, to a large, rather deep vessel, in which rich meats with their gravy are served to the wealthy'." It would seem that at this time any idea of keeping the offerings of food and wine in the same vessel, and yet separate, had been forgotten, and only the name preserved the memory of an ancient practice.

That vessels with separate compartments for the different kinds of offerings were in use at one time is clear from the *kernos* used in ancient Greece, "a vessel containing several small cups or vases joined together. It appears to have been used at the Eleusinian mysteries for carrying first-fruits."—Webster, *International Dictionary*. Here is a composite vessel used as a unit in a sacred ceremony, namely, the harvest festival. An article in *MAN*, 1937, 30, drew attention to the continuation of this to the present day: "in the ceremony of the Orthodox Greek Church called *Artoklasia* ('breaking of bread') first-fruits of the harvest, loaves, corn, wine and oil are carried in procession, blessed and distributed to the worshippers; and for this purpose a vessel of metal is used with compartments like the little vases of a *kernos*." Here, again, is a sacred compartmented vessel used as a unit. What is required now is the name the Latins used for the vessel employed in analogous practices. Were such vessels called *kernoi* or by a name that survives in 'Grail' derived from 'gradus'?

The Igbo twin-vessels lend colour to the suggested derivation of *grail* from *gradalis*, a stepped or divided vessel.

¹ Baring-Gould, S. *Curious Myths of the Middle Ages*. London, 1888, pp. 617, 623.

THE ORIGIN OF THE AMERINDIAN SUGAR-PRESS. *By K. P. Chattopadhyay. Illustrated.*

130 In a monograph on inventions by Amerindians, and also a paper on the same subject Nordenskiöld has described a sugarcane press found in America.¹ The sugarcane press, (fig. 1.) termed 'sugar-mill' in the paper and the monograph, consists of an (a) upright post fixed in the ground, and with notch cut in it, the notch having a hole in its centre; (b) and a long lever which can be fitted in the hole in the notch. The notch is cut like a quill-pen at the top; but has a horizontal flat base. The sugarcane is placed on the flat surface, and the lever is pressed, to squeeze out the juice. The mill is widely used in the northern part of South America, and also on the Isthmus of Panama. It occurs among Amerindians as well as Negroes, in this part of America. As sugarcane was introduced in America by the Europeans, Nordenskiöld has classed the sugar-press as a post-Columbian invention. He also quotes Dr. Roth to support his view that this hand-mill was not introduced by Europeans. Roth suggested that "the Indians received these sugarmills from Negroes seeing that they are commonly used by the Bushnegroes." Nordenskiöld adds "The prominent African specialists, Seligmann and Lindblom, have however written to me saying that sugarmills of this type are not met with among Negroes in their continent." Neither are similar sugarmills, according to Seligmann, known from New-Guinea or elsewhere in the whole of Melanesia.²

It is quite correct that no account of any sugar-

¹ 'Modifications in Indian culture through inventions and loans,' by Erland Nordenskiöld, Goteborg, 1930. 'The American Indian as an inventor' (Huxley Memorial Lecture), *J.R.A.I.*, Vol. LIX, 1929.

There are pictures and sketches of the mill in the monograph; and also a map of the distribution in America.

² *Ibid.* (monograph), page 83.

press exactly of this type has so far been published. A sugar-press of somewhat similar type has, however, been described as in use in Nepal, in a paper published a hundred years ago.³ The sugarcane press described therein is, however, undoubtedly adapted from a primitive oilpress in use in Nepal and elsewhere in India. In my paper on "Indian Oilpresses,"⁴ I have indicated the distribution of



FIG. 1.—AMERICAN SUGARCANE PRESS (after Nordenskiöld).

primitive oilpresses, and described several types not previously reported.

One of the types is common to Assam and the Nicobar Islands. In Assam it is used in the outlying districts. In Nicobar it is used by the Nicobarese, who are considered to be of a mixed Mongoloid stock. In both areas, the oilpress consists of (a) an upright trunk of a tree, in which

³ 'Note on the musical instruments and agricultural instruments and other instruments of the Nepalese,' by A. Campbell. *Journal of the Asiatic Society of Bengal*, 1837.

⁴ Paper communicated to the Anthropology Section, Joint-Session, of Indian Science Congress, and British Association, 1938. Calcutta.

a hole is excavated, or a deep notch is cut (*b*) and a long plank fitting into the hole or notch, and used as a lever. In the Assam type a flat block of shaped wood is placed in the hole, and the steamed baskets of seed are placed on it, and pressed down by the plank. In the Nicobar type a shaped block of wood is placed next to the notch and chopped cocoa-nut kernel in a bag of fibre is placed on it. The plank is then fitted and the whole family sit on it to exert pressure.

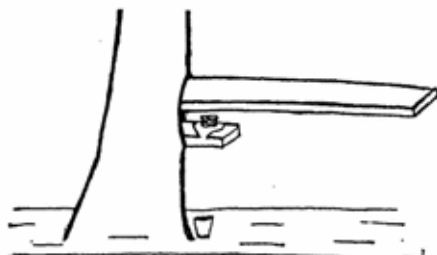


FIG. 2.—SKETCH OF THE ASSAM PRESS.

The sketch of the Assam press (fig. 2) and the photograph (fig. 3) of the Nicobar press show how closely they resemble the sugar-press described by Nordenskiöld. This early type of oilpress has been modified and replaced in other parts of India by another type where there are two planks, an upper and a lower, fitted to each other by means of an upright post passing through a hole at one end of each of the logs. It is to be found in Nepal, Assam, Chotanagpore, Central Provinces and Madras.⁵

This modified oilpress has been found in India among people who have preserved a culture which came to or arose in India prior to the Vedic Indo-Aryan civilization.⁶

It is suggested that the primitive oilpress found in Assam and Nicobar, is the parent of the sugar-press described by Nordenskiöld. In my paper on oilpressing, I have pointed out that there is mention of the use of oil and oilpressing in some parts of Indonesia, and of Africa. In some cases the pressing is reported to be done by hand. It is not, however, stated in many instances how the pressure is applied or the oil made. Until such

⁵ The oilpress in the Godavery District has been described by Cammiade (MAN, 1932, 110). The description and references to the other presses will be found in my paper referred to above.

⁶ 'Essay on the history of Newar culture,' by K. P. Chattopadhyay. *Journal of the Asiatic Society of Bengal*. 1924.

information is forthcoming, in all the cases, it is not possible to state exactly through what agency the primitive press described for Assam and Nicobar reached America. It is probable that on further inquiry this type of oilpress will be found in some parts of Indonesia or Africa.

It may therefore be concluded that the Assam and Nicobar type of press was introduced into America from the outside, and used for sugarcane pressing. It is not, however, impossible that its use for pressing sugarcane was already known to those who introduced it into America.

As noted before, Nordenskiöld has suggested that the sugarmill was invented by Amerindians and spread from them to Bush-negroes. He adds however that this view does not explain the occurrence of this mill among the Chama and suggests a pre-Columbian culture element adapted subsequently to press sugarcane. It is not possible in this paper to examine these suggestions in detail. But, as noted before, it may be pointed

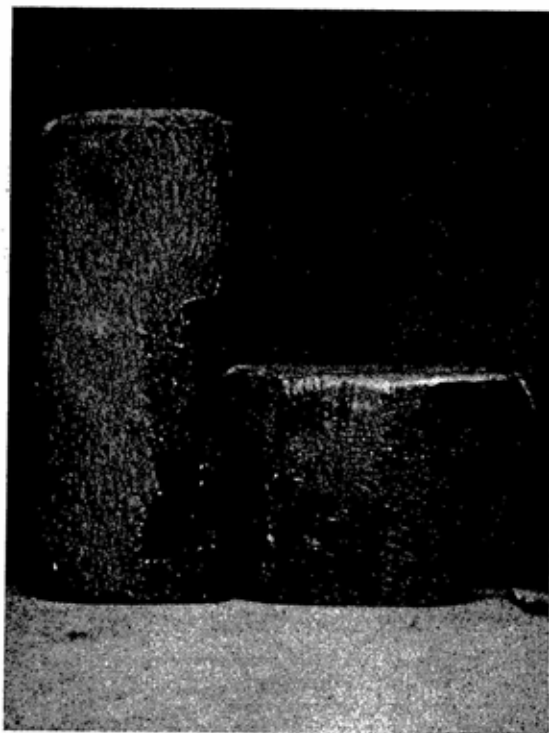


FIG. 3.—THE NICOBAR PRESS.

out that the Newars of Nepal, who use a primitive oilpress related to the Assam and Nicobar type, use also a sugarcane press adapted from the oil-

press. It is not so simple as the Amerindian sugarcane press. But the principle of operation is the same as in the oilpress. Here we do not have a single upright post, supplying the resting place of the cane. Instead of it, there are (a) two upright posts connected by two horizontal beams, (b) two other shorter posts with a cross-bar, and at some distance from it (c) a long lever fitted to the cross-bar just referred to, the latter serving as the axle of the lever, (d) a long thick plank with a groove and channel at one end, resting on the lower cross-beam at one end, and on the other pair of posts at the other end. The shorter limb of the lever is tied by a strong rope or thong to the upper plank. When the long arm of the lever is depressed, the shorter arm presses the two planks together. Pieces of sugarcane placed between the planks are squeezed in this way. The Newars, it may be noted, are a people at a fairly high level of culture. Their sugarcane press is evidently a marked advance on their oilpress.

Although this type of sugarcane press is no longer found in India, nor has been described elsewhere outside Nepal, it is very probable that a variety of the primitive oilpress was formerly used for sugarcane pressing in other parts of India. For, in all the areas where the primitive

oilpress had been superseded by the rotary Indian oilmill, drawn by bullocks, the pressing of sugarcane formerly used to be performed by an exactly similar rotary mill. Only the parts were made stronger to withstand the greater pressure and the mortar made larger to receive pieces of cane. The rotary oilmill as well as the sugarcane mill has been described before by others, and the details need not be repeated here. It may however be observed that the rotary sugarmill has already become obsolete in most parts of India, and been replaced by the modern type of press with rollers.⁷ The rotary oilmill also had been steadily giving place to the machine-driven oilpress; but it is likely to survive for some time, owing to the preference for oil pressed in the old Indian mill. This will explain why the still more primitive types have disappeared in India, except in outlying areas, or among a few aboriginal tribes, where the remnants of a very old culture has been preserved.

⁷ A good account of the rotary type of sugarcane mill, with a note on the oilmill of the same area, will be found in the following works: 'A journey from Madras,' etc., by Francis Buchanan, London, 1807, Vol. I, page 159 *et seq.* and page 228 *et seq.* There are plates showing the South Indian type of both the mills. The North Indian mills are described in 'Bihar Peasant Life,' by Sir G. A. Grierson (1885, 2nd edition 1926), page 46 *et seq.*

A RARE PAMPHLET ON THE MANDAN RELIGIOUS CEREMONY, IN THE LIBRARY OF THE HORNIMAN MUSEUM. By L. J. P. Gaskin, Horniman Museum, Hon. Advisory Librarian to the Royal Anthropological Institute.

131 The history of this pamphlet, attributed to George Catlin, is so curious, and the work itself so exceedingly rare, that it seems worthy of record.

The collation is as follows:—AN ACCOUNT OF AN/ ANNUAL RELIGIOUS CEREMONY PRACTISED/ BY THE MANDAN TRIBE OF/ NORTH AMERICAN/ INDIANS/ BY GEORGE CATLIN/ [1865, London. Qto. pp. 67.]

The title-page is without imprint (place of publication, publisher, and date), and in actual fact there is no title-page, the title being printed on what is technically known as a half-title.¹

The pamphlet was described in Trübner's *American and Oriental Literary Record*, No. 6 (21st August, 1865) as an interesting little monograph, of which only fifty copies had been privately printed, and distributed to a very

select circle, since the character of the work would not bear wide circulation. This description immediately elicited from Catlin a very vigorous note which concluded thus²: "The pamphlet you speak of as 'privately printed for a very select circle' is a gross and mangled extract from my account of the Mandan religious ceremony printed and circulated without my permission or knowledge; of which I have demanded the surrender of every copy printed; and for any reprint or circulation of the same I will prosecute. Sept. 22, 1865. George Catlin."

This little tract is therefore one of the rarest Catlin items in existence. There is no record of a copy in the British Museum, and no record of a sale during the present century; though a copy

¹ Half-Title. 'A brief title, usually without author's name or imprint, printed on a leaf preceding the main title-page.'

² From a letter printed in Trübner's *American and Oriental Literary Record*, No. 7. (21st September, 1865). [The next number].

was sold in New York in 1876 at the sale of the Squier³ Library.

I have only been able to trace two other copies. One is in the New York Public Library, and the other in the Henry Huntington Library, California: both appear to have been collector's copies, and both have exactly the same collation as the copy in the Horniman Museum Library. Our copy, possibly the only one in England, was found bound up with the *Stevens Archaeological Pamphlets*, purchased for the Museum library in 1904, and no doubt belonged to Mr. William Blackmore of the Salisbury Museum, who was a friend of Catlin and had travelled extensively in America.

On inquiry from Mr. Frank Stevens, the Director of the Salisbury Museum, and a nephew of Mr. Blackmore, I learnt that this Museum had at one time several copies of the pamphlet, and that Mr. Blackmore had provided the cost of publication. There must, however, be some mistake here, as Mr. Stevens speaks of a manuscript copy and water-colour drawing, and our pamphlet contains no illustrations whatever. It seems probable that Mr. Stevens refers to a later work published in 1867 by Catlin as a corrective to this unauthorized account of the Mandan Religious Ceremony.

While possession of the pamphlet must obviously be very limited, it was known to Sabin,⁴ Miner,⁵ and Field,⁶ who states "In the latter part of 1866 (1865) one of the numbers of Treubner's monthly catalogues contained a notice of a pamphlet purporting to be written by Mr. Catlin upon the secret customs of the Mandans, said to be indescribably lascivious. This excited indignant denial by Mr. Catlin of his authorship of the essay, of which, as only 50 copies were printed, little was known. The next year (1867), as a more effectual disproof of his association with what he deemed a disreputable performance, Mr. Catlin produced *O-kee-pa*. It was as much a defense of his early friends the Mandans as himself.

³ E. G. Squier, 1821-1888. Journalist, diplomat and archaeologist. One of the most distinguished Americanists of the 19th century.

⁴ Sabin, J. *A dictionary of books relating to America*, etc. 1870. Vol. 3, p. 435.

⁵ Miner, W. H. *George Catlin. A short memoir of the man, with an annotated bibliography of his writings. In the Literary Collector*. No. 3. 1901. p. 80.

⁶ Field, T. W. *An essay towards an Indian bibliography*. 1873. p. 64.

"The terrible religious and civil rite, here pictured with such horrible fidelity, is no longer practised, as the interesting people who described it are totally extinct as a nation."

While the contents of the pamphlet might have given offence at the time it was written (1865), all that the offending paragraphs contain is a description of a fertility rite of the Buffalo Indians, in which the motions of the bulls and cows during the rutting season were reproduced by human actors, and in which the central figure was the evil spirit *O-ke-hée-de* (the owl or evil spirit), whose make-up included an apparatus representing the genital organs of the bull.

Catlin no doubt thought that this part of the ceremony had received too much attention at the hands of his unauthorized editor, and in view of the fact that he had already⁷ been attacked on the authenticity of his description of the Mandan Religious Ceremony, he published in 1867:

O-KEE-PA/ A RELIGIOUS CEREMONY/ AND
OTHER/ CUSTOMS OF THE MANDANS/ BY/
GEORGE CATLIN/ WITH THIRTEEN COLOURED
ILLUSTRATIONS/ LONDON/ TRÜBNER AND CO.,
60, PATERNOSTER ROW./ 1867. 8vo. pp. vi (1) 52.

This work has a preface in the form of a letter from Prince Maximilian of Neuwied, who had visited the Mandans during his travels in America, attesting the veracity of Catlin's descriptions. The *O-Kee-Pa* sometimes contains a *Folium Reservatum*⁸, of three pages, which describes that part of the fertility rite already mentioned, and follows with curious similarity the phraseology of the pamphlet of 1865.

Catlin fiercely resented the attacks made upon his description of the Mandan Religious Ceremony, and in 1868 he petitioned Congress, affirming the correctness of his work, and asking that sufficient copies of *O-Kee-Pa* should be purchased by them for distribution to Scientific Societies, Libraries, and Public Institutions.

Officialdom, as is so often the case in matters of scientific interest, had the last word, and the record, with laconic brevity, states that Congress did not act on the Petition.

⁷ In Schoolcraft, H. R., *The Indian tribes of the United States*. Philadelphia, 1851-57. 6 vols. Vol. 3, p. 254. "The scenes described by Catlin existed almost entirely in the fertile imagination of that gentleman."

⁸ The Institute's copy of the *O-Kee-Pa* contains the *Folium Reservatum*.

POTTERY IN BUGUFI, TANGANYIKA TERRITORY *By R. de Z. Hall. Illustrated.*

132 The subject of the making of pottery is discussed in Meyer's work on Urundi, of which Bugufi forms ethnologically a part. But there are certain features in Bugufi which either are variants or are not brought out in his description, and therefore justify a further note on the subject.

Pot-making is the work of specialists, and not diffused as part of the normal household economic activity. These specialists are found partly among the agricultural Bantu population, and partly among a servile caste, the Batwa. In both cases, though to a lesser degree among the Batwa, agricultural work is carried on by the potters as well as their trade. The Bantu potters are not differentiated socially from the rest of the tribe: anyone may be apprenticed to the work, and they intermarry freely with non-potters. The Batwa, on the other hand, are set off from the Bantu to such an extent that they are not only despised, but are regarded as sub-human. One may meet a group of people who have gone buying new pots, and ask them whether they bought them from Batwa potters: if they did not, the reply is an emphatic negative *Oya! twaguze kw'abantu*—'No! we have bought from men'; the distinction being drawn clearly between 'men' and Batwa, and not between different tribes.

Among both Bantu and Batwa the technique is the same. Both men and women make pots, and there is no division of labour. Men and women alike mould, ornament, and bake; and a man may bake pots moulded by a woman, and vice versa. There is, however, a certain feeling of shame among Bantu women as regards pot-making: if it is suggested to a woman that she knows how to make pots, she will at once reply 'Do you take me for a *Muyovu*?' (i.e., Mutwa).

The materials used are river-clay, mixed sometimes with sand, but usually with rotten quartzite stone, which is ground down in a mortar. The reason for this is probably that sand is for the most part too fine.

The pots are moulded on the broken base of an old pot, never on a platter specially made for the purpose. The coil-method is employed, strips of clay about 18 inches long being rolled between the hands, and built up in a spiral. After the pot is shaped, the inside is smoothed with a piece of gourd about 4 inches by 2, to suit the hand. A broken pot in front of the workers will contain

half-a-dozen of these bits of gourd, each shaped according to the size and shape of the pot on which it is to be employed. The same sherd will contain several strands of cord, woven from grass and knotted at the end, which are used for the ornamentation of the neck of the pot. The usual ornamentation consists of a diagonal series of string impressions on the lip of the pot, and a strip, 1 to 2 inches wide, just below the neck. In addition there may be ornamentation, always near the neck of the pot, in the form of incised lines, and in one type a V-shaped pattern depends from the usual band in four places. The only other kind of ornamentation observed—an infrequent one—is the placing of four lugs at the lip of the pot.



FIG. 1.

After being moulded, the pot is left for a day to dry, after which the outside is smoothed, water being applied, and an old spear-head bent to a suitable shape being used as a scraper. The pot is then left another three or four days, according to the humidity of the atmosphere, to dry before baking. The baking takes place in a shallow pit about 8 feet long, 4 feet broad, and 9 inches deep. The bottom is lined with wood, on top of which is placed grass. A first layer of pots, closely packed, is laid on this, followed by a layer of grass and a second layer of pots, on top of which is placed more grass and finally wood. Breakages in firing are about 1 in 4 or 5. The broken pots are ground down to mix with clay for making other pots. Pots which crack in the drying are also re-utilized. Usually they crack transversely, —a natural consequence of the manner of construction—and a fresh top is built up on to the sound portion. The pots as they emerge from the furnace are only half-baked, and it requires further baking by the purchaser over the home fire before they are strong enough for everyday use.

The number of pots made in a day varies according to size. Of very small ones, 6–8 inches in height and diameter, such as are used for butter, as many as 20 can be made, but these are not in great demand, and odd ones are usually made, to use up bits of clay left over. Ordinary pots are about 10 inches in diameter and 12 inches high, with a wide mouth and no neck: 8 of these are reckoned a day's work. A larger size, about

12 inches by 15 inches, are made at the rate of three to the day, while the largest size, which is rare and only used for banana beer, about 18 inches each way, or sometimes as large as 24 inches, occupies a whole day in the making. There is another type with a neck narrowing to 3 inches diameter, which is of the standard size, and these again are made at about 8 to the day.

The pot-making season starts immediately after the end of the long rains, in early May, and continues intensely for a couple of months until the main harvest, in the first flush of which the bulk of the sales take place: after this, there is very little activity. The normal manner of purchase is for the required pot to be filled up

by the purchaser with foodstuffs, millet, beans or sweet potatoes, the required amount being the consideration for the purchase. But sometimes separate bargaining of food against pots will take place, and cash sales are increasing with the increasing use of money by the tribe. When purchased for cash, 5 ordinary pots can be bought for one shilling, or one large pot and a small one. Including the collection of all material, and allowing for breakages, a potter can turn out about 50 pots in 10 days, so that his cash return is about a shilling per day. This is three or four times the amount that can be got by wage-labour locally, but on the other hand the income can only be secured for a very limited part of the year.

TWO OBJECTS IN THE PLOVDIV MUSEUM, BULGARIA. *By James H. Gaul. Illustrated.*

133 The objects illustrated in the accompanying photographs are in the Pre-history Section of the Archaeological Museum at Plovdiv (Philippopolis), Bulgaria. Dr. D. Tsontchev, Director of the Museum, has kindly allowed me to photograph them for publication.

in colour. Its length is 25 cm. (broken behind), height 19 cm., and width at base 7.5, width of back 6.5 cm.

This effigy is slightly convex, Fig. 1a showing its convex surface. As decoration it bears an incised running spiral enclosed in an incised

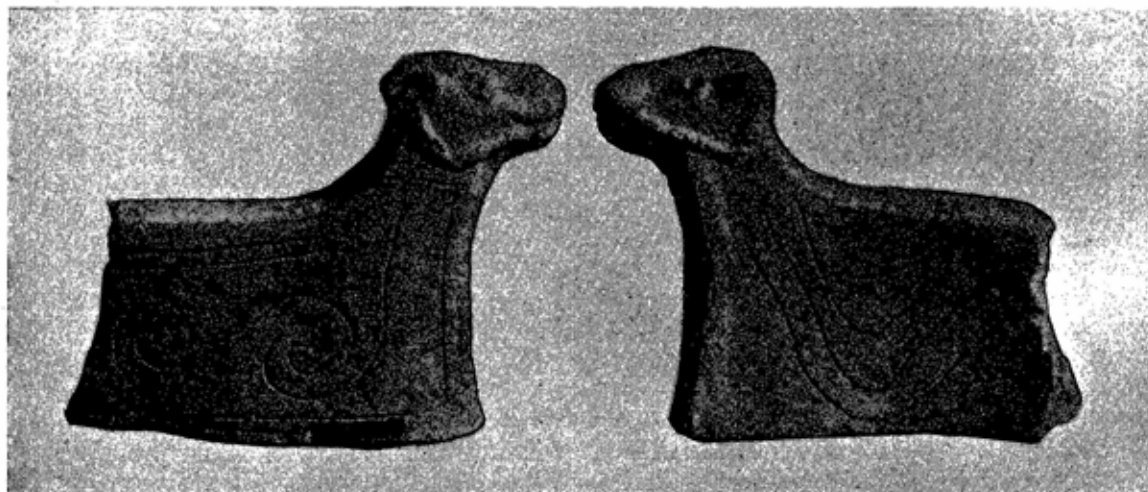


FIG. 1—CLAY FIGURE IN THE ARCHAEOLOGICAL MUSEUM, PLOVDIV, BULGARIA.

The first object, Fig. 1a, and (reversed) Fig. 1b, is an animal effigy purchased by the Museum and comes, according to the peasant vendor, from a settlement mound situated between Pazardjik and Peshtera. Pazardjik is 35 km. west of Plovdiv on the Maritza River, and Peshtera is 15 km. south of it.

It is made of well-fired, grit-tempered clay, and its surfaces are hand-smoothed, light brown

framing border. No evidences remain that either the incisions or the smoothed surfaces were further decoratively enhanced with any sort of painted or "crusted" ornament.

On the inner (concave) side, Fig. 1b, the decoration consists of three roughly incised chevrons. The front of the animal has a roughly drawn vertical crescent and two sketchy arcs. The top, or back, also has an incised decoration:

two opposed arcs between double straight lines which cross the back. Under the ears are short incisions, apparently indicating a mane.

The head of the animal is modelled in relief, with two ears projecting backwards, now broken off. The eyes are sunken pits in surrounding rims of clay which rise above the face level. In front of each eye, halfway to the muzzle, is a pit (nostril?). From behind the ears runs a raised ridge, with cross cuts, down to the nose. The mouth is an accentuated groove, the lips having a slight flare. From behind the ears runs another plastic, cross-cut ridge, which on both sides makes a right-angle turn to proceed over the cheeks to the mouth groove.

Though probably a sheep, this large effigy, from its "mane" marks, its set-back ears and muzzle, and its "braided" "bridle," might be considered a horse. If so, it is a very early representation, for the object is clearly an example, if an outstanding one, of the art of the "Bulgarian Tell Culture," to be dated towards the close of the III millenium B.C.

To the second object, a ram's head, Fig. 2a, and 2b (reverse), no such date is readily assignable. It is carved out of a very soft talc-schist. Its provenience (assigned to Macedonia) is unknown.

The broken base is 15 cm. long, 7 cm. wide, and the head stands 22.5 cm. high. The length of the head from the middle of the eye to the tip of the snout is 11.5 cm.

The eyes and curved horns stand out to the same level (0.5 cm.), the plain disk-eye enclosed by the cross-incised horns. The long muzzle tapers down to a cylindrical end 2 cm. in diameter, which bears no mark of a mouth. On the neck on each side are two rows of dot-centred circles, three circles below the horns, and a row of four on each side toward the back of the neck. There are two such circles on the snout.

The provenience of this ram's head is dubious; its stylistic affiliations and date are unknown in relation to anything Bulgarian. The authorities of the Plovdiv Museum, and the writer, would welcome suggestions.

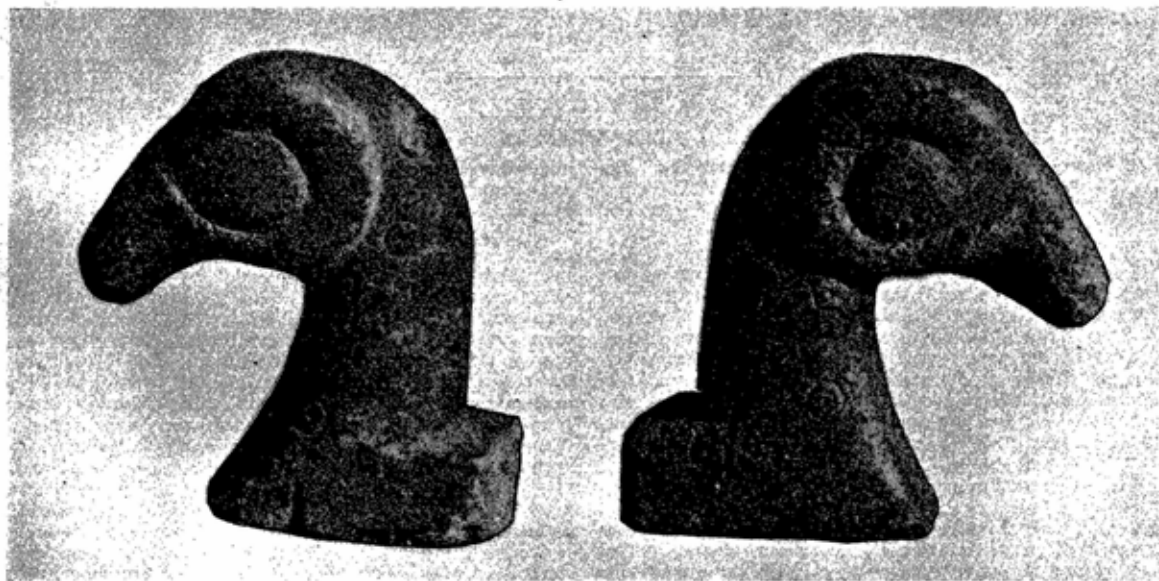


FIG. 2.—RAM'S HEAD OF TALC-SCHIST, IN THE ARCHÆOLOGICAL MUSEUM, PLOVDIV, BULGARIA.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Religion of a non-Chinese Tribe of Yunnan.

134 Summary of a paper by C. P. Fitzgerald.
13 June, 1939.

The tribe discussed is the Min Chia people

of Western Yunnan, district of Ta Li. In addition to speaking a separate language and having a different kinship system, the Min Chia have certain peculiar religious customs. It was shown that to them

Buddhism, local polytheism, and ancestor worship are not three religions but three aspects of one religion. A marked difference between acts of public worship in the temples and the private rites of ancestor worship in the home was shown to exist. Worship at a Buddhist temple was described and compared with the rites of *Shu Pao* or 'Burning the Book Bundles,' a rite of ancestor worship performed in the home. The casual behaviour so often remarked by Europeans at temples is not found in the private rites of ancestor worship. The reason for this different behaviour was discussed and the part played by women in ancestor worship and in the worship of the gods contrasted. The spring festival called by the Min Chia *Gwer Sa La* was described. Dancing and the wearing of fantastic clothing characterizes this rite, which may have some connexion with the exorcists called *Sai Dser* who 'dance out' the demons of sickness in a very similar manner. The attitude of the local government to these rites was shown to be mildly disapproving, but no actual suppression has been attempted. The relationship between the Chinese and Min Chia was explained as being one of equality between the educated class of either people, Chinese culture being the criterion of 'civilization' applied by the Chinese to alien peoples. It was shown that no attempt to impose Chinese ideas by force is made or has been made in the past.

OBITUARY.

Professor A. M. Hocart. Cf. MAN, 1939, 115.

135 The portrait printed below was received too late for insertion in the obituary notice, MAN, 1939, 115.



REVIEWS:

ARCHÆOLOGY.

136 *Art Rupestre Au Hoggar (Haut Mertoutek).* By F. De Chasseloup Laubat. Paris: Librairie Plon, 8, Rue Garancière, 1938. III, 60 pp. 4 sketch maps, and 32 plates (8 coloured).

This book, of which an abstract appeared in the *Illustrated London News* in January, 1939, contains the archaeological results of the French Hoggar (Ahaggar) Expedition of 1935 (Lieut. R. Coche, P. Lewden, R. Frison-Roche (a guide of Chamonix), Pierre Ichac, and the author, who represented the Musée du Trocadéro—now 'Musée de l'homme'). A first survey of the archaeological discoveries has been delivered before the Académie des Inscriptions et des Lettres in Paris by Lieut. Coche on 20 December, 1935 (Les Figurations rupestres de Mertoutek, Sahara Central, *Journ. des Savants*, Nov.-Dec., 1935). The author's task, in the present book, was to provide a more comprehensive publication of the material and to offer certain conclusions as to their origin and relationship with other civilizations. The plateau of Hoggar covers the area approximately between 5° and 8° east long.; 23° north lat. The principal difference between the works of art discovered by the French expedition and those observed by Frobenius and his assistants in 1913 north of the Sahara (namely, north of 31° N. lat. and between 2° W. long. and 10° E. long.) and published by Frobenius and Obermaier, in 'Hadschra Maktuba,' is that in the latter territory only one painting was discovered, while all the other representations are incised rock-drawings, though some of them show more or less faded traces of colours which, however, might have been added by more recent visitors. The art of Hoggar, on the

other hand, consists, partly, of engravings, both hammered and incised ones, and, largely, of paintings in the proper sense of this term. Some of these paintings are of large dimensions, such as 7, 6 yards length and ca. 1, 5 yards height (p. 17; comp. p. 20 f.). The most beautiful paintings are reproduced by coloured plates after gouache-pictures by Mr. Georges Aroutunoff, who was not a member of the expedition, but used photographs, drawings, watercolours, etc., taken by Messrs. Coche, Lewden, Ichac, and De Chasseloup Laubat (p. 8), for his admirable compositions. The author also shows the photographs, or at least a large proportion of them, so that viewers are able to compare these with the coloured reconstructions. The original watercolours, however, are not reproduced here, and the coloured compositions, therefore, differ from the photographs in some cases where the photographs are, to some extent, vague. It is true that the coloured plates, being worked out with the greatest care and wisely drawing profit from all the underlying material, provide an excellent impression of the works of art as such; but for comparative archaeological studies it seems to be commendable to rely rather upon the photographs. The amazing fresco, pl. XVIII, showing cattle and some human figures, has, in the coloured reconstruction by Mr. Aroutunoff, a remarkable attempt to both linear and colour perspective, namely, overlapping figures and gradually shaded colours. But, if we inspect the picture more closely, we find that some of the beasts in the foreground are smaller than some of those which, at first sight, are occupying the fond of the painting. Thus the question arises whether we

are faced with real perspective here and not rather with various layers of more or less faded pictures like those occurring in many Bushman paintings, with which, as the author quite correctly states (p. 21), there exist strong similarities. There is a great deal of animation in the human figures such as pl. XV, XXII, XXIII ff., which are entirely different from the stiff and often schematic human beings occurring in the Atlas, and adjacent, regions. In so far, the Hoggar paintings represent a hitherto missing link between the palaeolithic cave pictures of south-western Europe and a certain type of Bushman paintings. On the other hand, incised drawings such as reproduced on pl. XII and XIII are obviously closely related to corresponding types published by Frobenius and Obermaier (cf. 'Hadschra Maktuba', pl. 94, 134, 8, 16, 108, 21, 82 (2), etc.). Spiral designs like pl. XVI (1) have been observed by Ludwig and Margit Kohl-Larsen in northern Tanganyika (*Felsmalereien in Innerefrika*, Stuttgart, 1938). Again, some of the human figures shown in the large fresco, pl. XV, may be compared with Hans A. Winkler's *Eastern Invaders* in the rock-drawings of southern upper Egypt (*Archaeol. Survey of Egypt, Rock-Drawings of S. Upper Egypt, I*, Sir Robert Mond Desert Expedition, London, 1938, pl. XXIII and XXIII; *ibid.*, text, p. 26). Although Mr. de Chasseloup Laubat is modest enough to remark (p. II) that he has no scientific ambitions in the present book, he offers a highly interesting theory about the possible origin of the ancient race inhabiting the Ahaggar plateau (pp. 32 ff.) illustrated by two sketch-maps (pp. 33 and 37). He suggests that that race represented a mixture of three racial stocks immigrated from the north, south-west, and south-east (or south) respectively; and that, when the ancient Ahaggar civilization degenerated, or ceased, by changes in the physical environment (desiccation), the population emigrated in four divisions, one of which wandered east to become one of the ethnic elements composing the ancient Egyptian race. The author explains his theory by comparing the artistic styles of the Ahaggar region and, on the other side, ancient Egypt, and also by linguistic parallels or relationship. It would be premature to approve or reject this interesting theory so long as there are not sufficient archaeological—and also anthropological—facts available, in particular not from other regions in the central and eastern Sudan. But we have to admit that the author's suggestion is fascinating and deserves special attention, even if it should eventually turn out to be a mistake.

The polychrome rock paintings of the Tasili mountains north-east of the Ahaggar district discovered by the assistants of Frobenius as early as 1932 (reproduced in Frobenius *Ekade Ektab* (Berlin, 1937) pl. lxxvii ff. and lxxviii) show a strong similarity with those published by De Chasseloup Laubat and obviously belong to the same cultural stratum. This is, correspondingly, also the case of the incised drawings found in both areas. Those of the Tasili region seem to be much more numerous, so much so that the comparatively few paintings and drawings of the Ahaggar plateau might be only a south-western emanation. The resemblance between Central Sahara and ancient Egyptian arts may just as well, and perhaps more likely, be explained as a mere reflection of the latter. L. A.

NORTH AMERICA.

Ojibwa Sociology. By Ruth Landes. Columbia University Press. 1937. 144 pp.

140 The Ojibwa Woman. By Ruth Landes. Columbia University Press. 1938. viii + 247 pp.

In *The Ojibwa Woman*, Dr. Landes has given a straightforward examination of the position of women in a

Monumental Art of Northern Europe from the Stone Age. By Gustaf Hallström, published by Bokförlags Aktiebolaget Thule. Stockholm (Thule B-A), 1938. 554 pp., 13 figs. in text, 48 collotype plates in separate atlas.

Dr. Hallström has been engaged on the study of the early rock carvings in Scandinavia and neighbouring lands for many years. He has personally examined scores of sites and made tracings of thousands of figures. He here presents in catalogue form the results of his work in Norway, describing all known sites from north to south. A second volume will describe the rock drawings in Sweden, Finland and Northern Russia, and give Dr. Hallström's conclusions and analyses of style. Students and explorers will now be able, book in hand, to find the sites and study this art on the spot. The work is well illustrated with photographs of the sites, and the more important rock drawings are reproduced in a separate portfolio.

This art group is generally referred to the 'Arctic Culture', though many of the figures are contemporary with the neolithic or early metal ages elsewhere. At least a three-fold chronological sub-division has been determined, the styles not the same at all periods. The well-known Bohuslan engravings in Southern Sweden, dated to the Bronze Age, must not be confused with the earlier group under review.

Exception will doubtless be taken to the title, and the English is not always perfect; but it is never obscure and doubtless represents what the author wishes to say.

M. C. B.

Volker und Völkerbewegungen im vorgeschichtlichen Oberägypten im Lichte neuer Felsbilderfunde. By Hans Alexander Winkler. Published by Verlag von W. Kohlhammer in Stuttgart, 1937.

Since writing the review of Dr. Winkler's larger work the present pamphlet of 35 pages, excluding illustrations, has been sent to me for consideration. This little work naturally covers somewhat the same ground and is well illustrated. To some extent, however, the two works are complementary and not all the illustrations in the pamphlet are reproduced in the same way in the larger work. The general thesis, however, is obviously the same and naturally the larger work is in every way much more complete. The existence of the pamphlet, however, should not be forgotten.

M. C. B.

The Archaeology of the Oakhurst Shelter, George, S. Africa. By A. J. H. Goodwin, M. R. Drennan and J. F. Schofield. Trans. Roy. Soc. S. Africa, XXV, iii, 1938.

The farm Oakhurst lies some 13 miles east of George, near the south coast and close to some fresh-water lakes. The shelter, in a cliff, is some 50 feet in length. Work has been going on since 1932 with interesting finds, including graves. The site has yielded industries belonging to the following cultures: Wilton (top 3 feet), Smithfield A and Smithfield B. At the bottom there are indications of a pre-Smithfield settlement. All the pottery (described by J. F. Schofield) comes from the upper layer, and seems to be of no great antiquity. The skeletons are described by Dr. Drennan. Goodwin is to be congratulated on the somewhat laborious excavation and (with his colleagues) on the admirable presentation of results.

M. C. B.

primitive society, whilst *Ojibwa Sociology* provides us with something of a cultural background. The Ojibwa hunt and trap in the winter, and for the rest of the year work on their maple groves and rice beds. Villages are small and, for the greater part of the time, the tribe is split up into family units. The political organization

is treated somewhat summarily, but the material on kinship presents certain deviations from features characteristic of other primitive communities. The terms for 'mother,' 'father,' and 'siblings' are not classificatory. The discussion of kinship obligations reveals a marked degree of latitude in their fulfilment; the laws of exogamy are frequently broken; kinship terms are adjusted to meet a variety of situations; gifts between affinal relatives are few, but are more consistently exchanged within the family. In marriage there is much individual choice, but unions are easily dissolved. Dr. Landes is inclined to attribute these irregularities, not so much to cultural disintegration, but to the wide range of behaviour culturally granted to the individual. (*O.S.*, p. 64.)

Unfortunately, whilst rightly stressing the individual deviations and providing us with some interesting case histories, she has too often failed to integrate her material and to develop her generalizations. The infringements of law would appear to be more frequent than elsewhere. If this has always been the case, it is difficult to see why the culture has not completely disintegrated long ago; or why norms have not been modified to meet the emphasis on individual assertion and achievement. If the majority do abide by the law, then she does not make clear the sanctions that compel some measure of conformity. If on the other hand they do not, are we justified in speaking of norms? Surely in discovering and establishing the norms for a community, we must be guided by the average type of behaviour, and must distinguish this from the ideal.

The account of communal life is sketchy. The family would appear to be the most important social group, yet we are given no generalizations as to its rôle within the culture as a whole.

In *The Ojibwa Woman*, it is pointed out that it is the men in particular who are exhorting from childhood to seek visions granting power from the supernaturals for hunting, warfare and sex adventures. The women's work is considered inferior, but is more varied, and includes fishing, trapping of small animals, tanning, weaving, tailoring, sewing, beadwork, the manufacture of some utensils, the gathering of fruits, cooking, sugar-making, and harvesting of rice. Often, owing either to inclination, early training in the company of a father, or the absence of a man to assume responsibilities, the women become hunters, fighters and doctors, and achieve some measure of respect, because of "the stress upon individualism."

On the basis of her data, Dr. Landes asserts that the women are the unspecialized, the dispossessed, the under-privileged; that individual values are more important for the men than for the women; that "only the male half of the population and its activities fall under tribal regulations, while the female half is left to spontaneous and confused behaviour." But when we have recognized, with Dr. Landes, that prestige is associated only with male pursuits; that there is more specialization among the men, and that no woman conforms to the cultural mean (if we must postulate one under these circumstances), one still feels that she has not done full justice to her material. Obviously if we are to consider women as members of society, they must submit to some tribal laws. There are the common interests created by a common environment; there are the norms which govern the relationships within the family at least, the ownership of property and the degree of co-operation between husband and wife. If the women sometimes take on the men's work, there remain all those other duties which, failing the assistance of the men, must be carried out by the women themselves. If there is little prestige attached to such tasks, still

some discussion of their importance in tribal economy would have been to the point. Finally, if the women are passive and inferior, they do reveal initiative in performing men's work, in asserting their rights in marriage and often in taking the first steps in divorce.

In every community there is a social, ritual, often an economic and political differentiation between the sexes; but at the same time due weight must be given to what is common in their cultural heritage on the one hand and, on the other, to the standards, interests and activities peculiar to the men or to the women. In the particular monograph in question, Dr. Landes has not granted validity to the "closed world (of the women)" where each woman is distinctive, where women's work "is valued explicitly, and where women's values are pursued" (p. 18).

PHYLLIS M. KABERRY.

The American Indian: an Introduction to the Anthropology of the New World. By Clark Wissler. Third Edition. New York: Oxford University Press, 1938. xvii + 466 pp., plates and text-figures, Price 18s.

As the 'Introduction' which it claims to be, this work has established itself in the favour of anthropologists, and no doubt of many others. First published in 1917, a second edition was called for in 1922, and after this longer interval the third issue will be welcomed. It differs little from the second, though the author has made full use of recent investigations. As would be expected from the fact that Dr. Wissler is a museum-man, material culture and archaeology are predominant features of the book, but somatology, social anthropology and linguistics are by no means neglected. Covering such a wide field in one relatively small volume it was scarcely to be avoided that the text should have an encyclopædic flavour, and that the reader should sometimes feel that he is being hustled. The 'general reader' may also feel that a preliminary study of the elements of anthropology would have helped him on his way. All readers may, however, pause for breath at frequent intervals, since the numerous illustrations and distribution maps will encourage them to think a little for themselves. One is struck with the frequency of the author's demand for further investigation, and it is evident that he is not under the delusion that the intensive studies of the cultures of the American Indian, past and present, have exhausted the subject. There are still uncertainties, and one is grateful that in the list of aboriginal inventions (many of which are mere discoveries) those known in the Old World also are "believed to have been" independently invented in the New. Later, however, we read "Independently, the 'New World developed agriculture, pottery, the higher types of basketry and cloth-weaving, the working of the softer metals, and the manufacture of bronze.'" Many anthropologists, even in Europe, will accept these beliefs. Others, not. In the section dealing with archaeological problems, the author refers to the "pre-historical snarl" which needs to be untangled. Snarls, of independent origin, sometimes divert the European archaeologist in his course.

H. S. H.

The Eyak Indians of the Copper River Delta, Alaska. By Kai Birket-Smith and Frederica DeLaguna. Copenhagen, 1938. 592 pp., text-figures 18, plates 18, genealogical table and Eyak vocabulary.

The Eyaks are a hitherto little-known tribe on the southern coast of Alaska, between the Eskimo of Prince William Sound on the west, and the Tlingit Indians of Yakutat Bay on the east. They have been known under a variety of names and have been variously regarded as Eskimos, Athapaskans, Tlingit, or combinations of these stocks.

The Danish and American authors have combined very successfully in making an elaborate and exhaustive study of the ethnology of this tribe. They have accumulated the facts in great detail regarding Eyak culture and folklore, and have discussed them in all their bearings on the history of the tribe and their relation to the cultures of their neighbours. They have, indeed, taken a much wider survey, and have considered the Eyak in relation to Asiatic-American migrations, and the dispersal of circum-polar, circum-Pacific, Eskimo and Indian cultures.

Dr. DeLaguna visited the tribe in 1930, and from a survey of abandoned village sites as well as conversations with a chief and the first white trader there, learned enough to show that they were Indians distinct in language and culture from both the Tlingit, the Eskimo and the Athapaskan-speaking Atna of the Copper River valley. Much information was also obtained from Colonel Abercrombie, the first American explorer to visit the Eyak, over 50 years ago. There were still earlier Russian contacts.

From a detailed consideration of 183 culture elements, it is found that a large number of them (45 per cent.) belong to the primitive ice-hunting stage, while very few belong to the snowshoe stage. The toboggan, bark-canoe, snowshoe netting-needle, bear ceremonial, etc. were all absent. The snowshoes were of a primitive type.

The circum-Pacific traits included 27 elements, such as the rectangular plank-house, separate sleeping-room, twined basketry, slavery, and raven myths, while 22 elements were derived from contact with the Tlingit. Elements belonging to the Eskimo Thule culture included the gutskin coat, frock hood, and derision songs; whereas the feather headdress, quoits, use of native copper, and such conceptions as the thunderbird, were borrowed from the Northwest Coast and Plateau areas.

It is concluded that the ice-hunting stratum underlies the Eyak culture. Only a few elements of the Asiatic snowshoe culture reached them—a condition which they share with the Tlingit and the Haida. This group of tribes is therefore regarded as having crossed Behring Strait in the ice-hunting stage, the northern Athapaskans receiving the snowshoe later, which enabled them to penetrate into the Mackenzie region. The Eyak appear to have occupied their present coastal habitat for a very long period, and may have been the original owners of the area now occupied by the northernmost Tlingit, the Yakutat.

This highly documented study should help to throw light on the cultural history of Alaska and the Northwest Coast, and will serve as a mine of accurate information.

R. RUGGLES GATES.

Singing for Power: the Song Magic of the Papago Indians of Arizona. By Ruth Murray Underhill.

143 Berkeley: University of California Press, 1938. 158 pp. Price 9s.

Magic and dreams and wish-fulfilment are so closely related that the resulting phenomena can be studied throughout the world. The omnipotence of the spoken word is bound up with the idea of the power of air, the breath of life, the divine afflatus, personified in older mythology as Rhea or Venus (both words mean 'wind') or as the 'Holy Spirit' of modern religion.

The spell in its simplest form is merely a spoken wish. If a spoken wish is followed by fulfilment, it has become a powerful charm. By an extension of the same idea

the spoken word can create ("And God said, Let there be light, and there was light") or destroy; but one must know what one is creating or destroying. Thus the knowledge of origins (including genealogy), or of the thing's real name, is very potent; a recitation of origin is often included in a spell which might otherwise be powerless. Closely allied is the importance of using not merely the correct words but the correct form or ritual, and thus song is evolved. Natural science is encouraged by this need to know the origins of things, and a scientist becomes a potent magician, credited with the power not only of creation and destruction but also of transformation either of himself, or of one thing into another.

Another stage in evolution is the science of healing, either by exorcizing evil or by a charm or prayer to some higher power to remove evil. Prayer is a higher form of spell or charm; and, as a benevolent wish develops from charm to prayer, so a malevolent wish develops to a curse. The overflow of song from magico-religious to secular uses produced ballads; community-singing or choruses may have arisen as a charm to facilitate a communal task.

Some of these aspects of song-magic are observable in *Singing for Power*: "all that is necessary to make their magic prevail is a description of the desired thing" and "the songs, like all Papago magic, are not prayers. They are only descriptions." Yet on the next page is a wish, "Haiya, God my father! Would it might rain now!" and later: "Yonder find my enemy and make him helpless!" "Gnaw the bow of this my enemy," etc.

The connexion of song-magic with dreams and visions is shown: "Such a magic spell is never consciously composed: it is 'given' by the supernatural powers . . . And a dream always contains a song." Scalping an enemy, killing an eagle, and fetching salt from the Gulf of California, four days' journey, are followed by ritual dreams or visions. The Papago medicine man owes his power to his dreams and his ability to sing himself into a trance, during which he makes diagnostic revelations.

This attractive little book also describes the ritual attached to deer-hunting, and to ceremonial intoxication with fermented liquor to induce rain.

CANNING SUFFERN.

Handbook of American Languages. Part 3. Edited by Franz Boas. Hamburg—New York, 1933-38. 144 708 pp.

This part of a well-known *Handbook* contains accounts of the Tonkawa (Harry Hoiyu), Quilente (Manuel J. Andrade), Yuchi (Günter Wagner), Zuni (Ruth L. Bunzel) and Coeur d'Alene (Gladys A. Reichard). Tonkawa is now spoken by only six persons; Quilente by 180, and a few Hoh persons speak something like it; the Zuni population has increased from 1,640 in 1910 to 1,920 in 1928, and no fewer than 11 individuals collaborated in this account of their speech. For Coeur d'Alene (an interior Salish language), also, native helpers were available. Besides a detailed grammar, illustrations are given of the languages as spoken, with English versions. How greatly the whole series is indebted to its indefatigable editor, only specialists may judge, but it is not necessary to be a specialist to appreciate and welcome a fine piece of collaborated scholarship.

J. L. M.

GENERAL.

Anthologia Anthropologia. The Native Races of Asia and Europe. By Sir James George Frazer.

145 O.M., F.R.S., F.B.A. Edited by Robert Angus Downie. Percy Lund, Humphries & Co., Ltd. London, 1939. vi + 399 pp. Price 35s.

The present volume, the third of this series of anthologies, is divided into various sections dealing with Indo-China, Tibet and China, Korea and Japan, Northern Asia, India, South-Western Asia, and Europe respectively (Books I to VII). Like the companion volumes it is a

systematic, though, of course, not exhaustive, collection of extracted passages from literary sources. Much of the information here offered is taken from old or rare books, which is particularly the case in the European section. There is no doubt that this volume will be of great use to anthropologists engaged in historical

research and thus interested in the older literature, though we also find large abstracts from some more recent standard works like Sarat Chandra Roy's 'Orisons of Chota Nagpur,' and others. The index adds much to the value of the collection—in fact, it is indispensable.

L. A.

CORRESPONDENCE.

A Study of the Ceramics from the Deeper Levels of the Mumbwa Cave, Northern Rhodesia, by Dr. L. H. Wells. Cf. MAN, 1939, 63.

SIR,—Dr. Wells' name is so intimately associated with the study of South African ceramics that an article from his pen (MAN, 1939, 63) will not only deserve, but will be bound to receive, the closest attention from other students in the same field.

Before discussing Dr. Wells' paper in detail, it is necessary to point out that Dart and del Grande, in their paper on the Mumbwa Cave,¹ made use of the term "Late Stone Age" in a manner which differed radically from the accepted usage in the Union of South Africa. This they fully recognized, and explained their position time and again; thus it is said to include the "Glen Gray, Still Bay, Smithfield and even 'Wilton industries' (p. 422) with 'occasional' implements of the Fauresmith (or Moustierian facies) 'culture'."

Now, since Dr. Wells uses the term "Late Stone Age" to describe the same strata for which it was used by the excavators, it is evident that he must be held to use it in the same sense, and that we are to understand that it includes the whole of the Middle Stone Age as well as the period which is commonly called the Late Stone Age. There are, of course, good grounds for this treatment of the subject, and no objection can be raised to it, as long as the term used is clearly defined; otherwise, it is certain to lead to confusion.

In the opening paragraphs of Dr. Wells' article, he makes certain statements which we must quote in full if we are to appreciate their significance—

"That part of the collections included, in addition to the human skeletal remains, part of the cultural material found in association with the deeper burials. Among this are the ceramic fragments which form the subject of this study."

"In the Excavators' Report it is pointed out that, while fragments of pottery occurred most abundantly in the uppermost part of the deposit, they were found also in smaller quantities as low down as the very base of the Late Stone Age stratum, at a depth of approximately two metres. It is these sherds from the deeper levels which have survived. Since from their position in the deposit, they would appear to be of considerable antiquity, their relation to other African ceramics is, therefore, not the least of the problems raised by the Mumbwa finds."

We believe that anyone reading this without a profound knowledge of Dart and del Grande's report would naturally be drawn to the following conclusions:—

(1) That pottery had been found in association with the deeper burials at Mumbwa.

(2) That pottery had been found beneath a deposit of Late Stone Age material which had an approximate depth of two metres.

It will be our purpose to show that such conclusions, if not contrary to the actual facts, are at least at com-

plete variance with the records preserved to us in the Excavators' Report. We will proceed to present our case seriatim.

(1) In the Excavators' Report, a whole section was dedicated to a discussion of the skeletal remains which they recovered, and for the purpose of this description they divided the excavation into five strata. Dr. Wells does not state directly on which of these strata his "deeper burials" occur, but since the remains found on Strata I and II were very fragmentary, and since these strata have a dimension of only 40-70 and 70-100 millimetres respectively (p. 425), we are sure that we shall do no violence to his argument if we accept Stratum III as being the highest in which definite burials were found.

It is therefore somewhat surprising to find from Fig. 5, and a statement on p. 389 of the Excavators' Report, that this Stratum was at a depth of 8 feet below the datum, that is to say, 18 inches below the level at which Dr. Wells states that the lowest pottery was obtained. Now, although the contents of six graves are given in detail, in not one of them was any pottery found, nor throughout the whole Report is there the slightest suggestion that any pottery was ever found in association with a definite burial.

Before we can proceed to a discussion of our second point, we must have recourse to the Excavators' Report:—

"The most superficial or iron arrow-head stratum is not demarcated by any ostensible topographical feature from the pure stone culture stratum."

"It has been represented differently in the diagram merely because it differs in revealing a wide variety of unglazed, freely decorated pottery and a few iron fragments (arrow-heads), and also because there was a great number of bone and shell ornaments at that level. Here also were discovered rubbing-stones and a 'kwe' or 'Bushman' digging-stone. Very occasionally, however, pottery was also encountered at deeper levels, especially towards the side wall, and also broken fragments of haematite 'kwe's, even in the furnace stratum" (pp. 388 and 389).

"Pottery objects are found in great abundance in the first foot of the deposit, and at first we were under the impression that it was entirely restricted to that region (see Photograph 8). That region is unquestionably the part where it occurs in the greatest profusion and where it is most richly decorated. But subsequent excavations proved the very occasional occurrence of undecorated pottery and even one decorated pot as low down as the furnace refuse" (p. 418).

(2) Now, although it is perfectly true that the 'Late Stone Age' deposits attained a maximum thickness of about two metres at one point, it is not recorded that any pottery was found there, but 'especially towards the side wall' where the deposits were only half as deep.

In order to clarify our argument, we have prepared a diagram (Fig. 1) showing the Excavations drawn to scale, and making use of the Excavators' nomenclature. From this it will be seen that at one time the floor of the cave was formed by a dome-shaped mass of sterile red clay. Over this, and in conformity with it, the Moustierian stratum was deposited, over which the later

¹ Raymond A. Dart and Nino del Grande, *The Ancient Iron-Smelting Cavern at Mumbwa*, Trans. Roy. Soc. S. Africa, XIX, pp. 379-427.

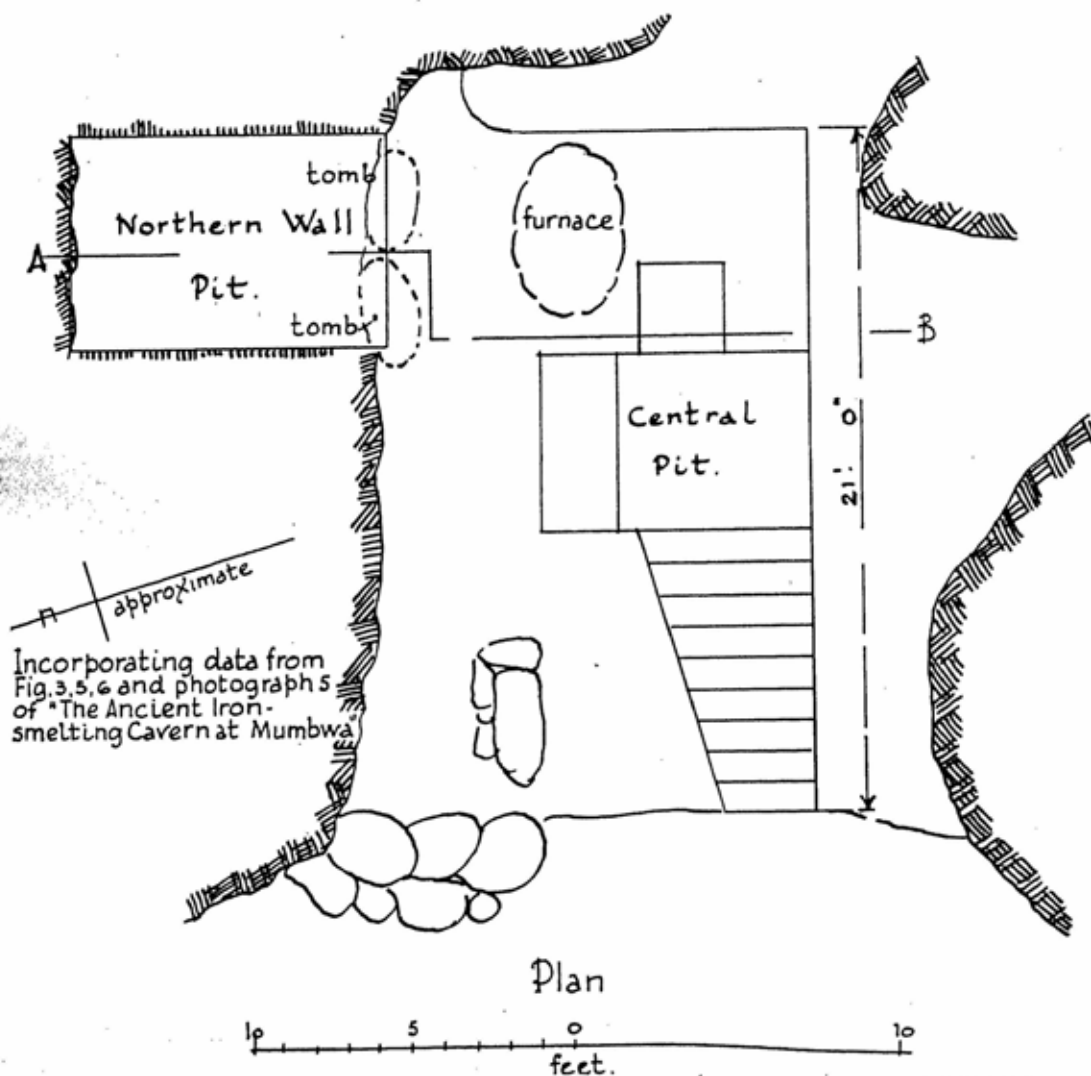
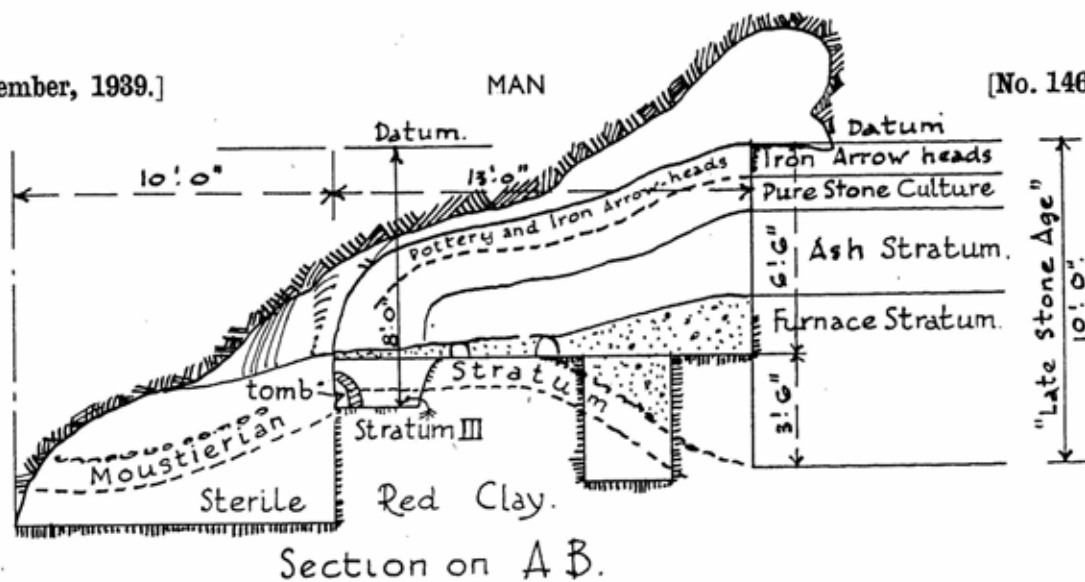


FIG. 1.—PLAN AND SECTION OF EXCAVATION IN THE MUMBWA CAVE, NORTHERN RHODESIA.

deposits were heaped up to attain a maximum depth of 6 feet 6 inches at a point where the cave floor is about equidistant from the walls, towards which the floor slopes downwards until the deposits are reduced to about half of their greatest depth. It will be seen from the diagram that the arrow-head stratum actually dips downwards towards the furnace stratum—this is very clearly indicated on Fig. 6 of the Excavators' Report—thus accounting for the presence of the pottery in the furnace stratum in the neighbourhood of the cave wall.

The whole section indicates very clearly that the later deposits must have been dumped in the centre of the cave and have attained their present position through slipping down the talus towards the cave walls.

We believe that this proves conclusively that although the pottery was found at a lower level, stratigraphically it belongs to the Iron Arrow-head stratum, a fact which is amply attested by the similarity of the decorative designs illustrated in the Excavators' Report and by Dr. Wells.

Further, this slipping of the deposited material towards the cave walls probably accounts for the fact that while in the Excavators' Report only one decorated pot was noted as being from beneath the Iron Arrow-head stratum, Dr. Wells is now able to illustrate no less than nine.

From the foregoing, it is clear that the Excavators' Report contains nothing that would lead us to believe that any pottery at all was discovered beneath a deposit of 'Late Stone Age' material which had an approximate depth of two metres.

Dr. Wells also states that—

"It must be concluded that the pottery is an integral part of the 'Late Stone Age' culture of the site and that it was made by a people who were physically non-Negro."

We would suggest, on the other hand, that it cannot be concluded that the pottery is an "integral part of the 'Late Stone Age' culture of the site" because—

(a) The 'Late Stone Age' Stratum had a depth of 10 feet over all. The lowest point at which pottery occurred was 6 feet 6 inches below the datum, but it was found in quantities in the superficial stratum, of which the depth was only a foot.

Our original authors insisted on the homogeneity of the 'Late Stone Age' material, and we would also insist that the pottery which was totally absent from more than a third of the vertical depth of the 'Late Stone Age' deposit, and present in quantities in only one-tenth of that depth, cannot reasonably be described as an 'integral part' of the culture which gave rise to this deposit. It must therefore be regarded as an intrusive element which in no wise disturbed the homogeneity of the 'Late Stone Age' material.

(b) The original authors termed the only zone in which pottery was found in 'great abundance' the Iron Arrow-head stratum, and in so doing, they stressed the normal relation which exists between the manufacture of ironwork and pottery. The similarity which Dr. Wells points out as existing between the wares which he describes, and those from the Iron Arrow-head stratum, does but emphasize the probability that they, too, may have been made by an iron-working people rather than the 'Late Stone Age' inhabitants of the place.

(c) The decorative designs on this pottery were made with a stamp or comb, which was notched at regular intervals. From an examination of some of the sherds, it is evident that the comb was so fine that it was probably made of metal rather than of wood, which appears to have been more commonly employed. It is entirely improbable, therefore, that wares decorated in the

former manner could ever have been made by a people who enjoyed a 'Late Stone Age' culture.

(d) The pottery from first to last shows no sign of development. That from the deepest, and therefore presumably the most ancient levels, is a highly sophisticated product which evidently had a long tradition behind it. For this reason also it must be regarded as an intrusive element and not as "an integral part of the 'Late Stone Age' culture of the site."

From this it must be clear that Dr. Wells, in asking us to accept "that the pottery is an integral part of the 'Late Stone Age' culture of the site," is in reality pushing back the introduction of a highly developed pottery into the most remote fastnesses of the Middle Stone Age. Whether or not he is correct in doing this, we are by no means qualified to pass an opinion, but we feel that we are on strong ground when we state that such a revolutionary change in accepted ideas should be based on the unimpeachable evidence of a sealed site, and not on one which had been subjected to such gross disturbance, as the Excavators stated in describing the graves which they discovered in Stratum III.

Their excavation was a matter of great difficulty as the massive roots of a tree growing outside the cavern had penetrated the earth alongside the cavern wall and had battened on the burials. Further, the ubiquitous Rhodesian termites had installed themselves in the cavern, and jointly these factors had played great havoc with the human remains (p. 390).

As the tunnels made by white ants are often three or four inches in diameter, it is unnecessary for us to comment further, except to remark that it is impossible to see how the termites and tree roots could have played havoc with the human remains without at the same time destroying or distorting the stratigraphy of the other prehistoric material.

We are again at issue with Dr. Wells regarding the relation of the Mumbwa pottery to that from Gokomere. We have recently been engaged in making carefully detailed drawings of some one hundred and fifty sherds from the latter place, and have also examined the Mumbwa wares. To us the resemblances are as striking as they are complete, for the convex rim bands, the stamped decorations (of both types mentioned above), the triangular impressions, also the use of the twisted wire or cord and the angular profile, are found in the wares of both places.

According to the Excavators' Report, the furnace stratum on which the oldest pottery was found dates from "four or five thousand years before habitation ceased in the cavern" and "it is tolerably certain that...human habitation ceased...towards the beginning of the Christian era or shortly afterwards" (pp. 419 and 420).

It is, therefore, not a little curious to find that after seven thousand years, the neighbouring Tonga and Toka still use designs which are related to those which decorate the earliest pottery found, while the Ila employ for the same purpose triangular impressions which are exactly similar to those shown on Dr. Wells' Plate E.c. Not only is this the case, but the arrow-head with the spirally twisted shank (Fig. 35, 2 of Excavators' Report) is identical with those made to-day by the Luchase and the Lovale.

Dr. Wells' castigation of "the loose habit—of dubbing "every fragment of unglazed pottery as Bantu," leaves us entirely unvisited by any grace of repentance, but rather fortified in the belief that, had our mentor followed that simple course, he would have escaped all the pitfalls which, in our opinion, mar a very excellent paper.

J. F. SCHOFIELD, A.R.I.B.A.



CRANMORE MUSEUM

1

*Cranmore Ethnological
Museum,
Chislehurst, Kent.*



CRANMORE MUSEUM

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**'DUKA' FIGURES
FROM
SANTA CRUZ.**

MAN

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ORIGINAL ARTICLES.

With Plate K.

Gillett

'DUKAS' OF SANTA CRUZ. *By Joyce Gillett, Cranmore Ethnographical Museum, Chislehurst, Kent.*

147 These wooden figures from Santa Cruz are well deserving of attention in that they are known to represent the ghost—or the soul—of a person who has been successful during his life in gaining a certain amount of prestige among his people, and therefore dies a man of note. A wooden figure is made and erected in his house after which a feast is given. The *duka* remains in the house; it is said to stand on the floor in a corner and this fact is borne out in that the bases of most of the figures are rotted and eaten away whilst the upper parts are well preserved. Very often skulls are seen standing around the *duka* and these are said to be those of the past owners and keepers—each *duka* having one keeper—and often gifts of tau and conch shells are placed before the image.

It is interesting to note that these figures are made and regarded with great esteem, not because there is an unwillingness to forget the dead, but rather because there is a fear that unless something tangible is made in the likeness of the one who was lucky during his lifetime then that which was to the good of the people during the life of the person now dead will be lost for ever. So the native, having made the image, convinces himself that he has captured for all time the gift that was bestowed on the deceased, and that this gift can now be transferred into the body of a living person—usually a member of his family or a relative—and will so continue to function.

Cranmore Museum has twenty of these figures in the Pacific Collection, varying in size and shape, and in each one the carver has produced a line of art very pleasing to the eye and one which portrays his careful study of the human form.

I have mentioned that these figures are usually found standing on the floor of the houses, but this is not so in every case. Fig. 1 came to us with the information that it was found in a disused and neglected house—not a ghost house—and was suspended from a height of five feet and encased in a conical bird cage made of light pieces of wood, the whole of the cage was covered over with mats and tapa cloth and appeared not to have been opened for a considerable time, also the wrapping had the appearance of having been smoked over a fire.

It is interesting to note that this figure was also wrapped round with many layers of tapa cloth which, on unwrapping, was found to disclose a very carefully decorated male form. Suspended from his neck is a *tamar* attached with a black and white currency cord; from the nose and ears hang pendants of pearl shell. The hair, which is dressed into the shape of a cone and protrudes out at the back of the neck, is wrapped round with tapa cloth and hung with pearl shell pendants, of which only one remains to-day. The biceps and wrists have plaited fibre shell pendants; round the waist is a woven loin cloth and a girdle of black and white currency. The knees are encircled with coix seeds, with cowrie-type shells in front; on the right knee is a pearl-shell plaque. The ankles have loose strands of fibre wound round them. The whole of the figure is dusted with turmeric. This figure

is called *Na-lom-bla* and comes from a village named *Nimbe*; it is said to be a *duka* connected with shark fishing, before and after which offerings of food are placed in front of it.

Fig. 2 is an unusual carving of a double *duak* and one which shows much delicacy of workmanship. The two figures are said to be brothers, that on the left named *Lemumbra* and that on the right *Leo Mumbur*; their mother's name was *Talimba*—a legendary personality.

These images are no longer carved to-day but are still to be found preserved by the older natives. I understand from Mr. Jones of Vanicoro—who has kindly supplied much of the information for this article and also the specimens for our collection—that these *dukas* are not exposed to view as formerly, probably owing to the new religion and beliefs, but are partitioned off into small shrines.

Nearly all the figures in the Cranmore collection are carved in a standing position but there is one exception (Fig. 3) which is said to be a seated figure of a shark-god named *Men-areta-lu* from the village of *Nelu*, *Trevanion Island*. The spikes on the wrists of this god—also seen on many of the others—are said to be used to drag the sharks from the water and place them in trees on the shore.

All these *dukas*—whether male or female—(excepting Fig. 1) are carved along a similar line of art, each has the square-cut jaw, the straight limbs, and the tense expression of face. This example (Fig. 1), however, has a softer line given to the face and is certainly more human in expression.

These wooden figures must not be confused

with the wooden stocks known as *Duka* Posts Fig. 4 which, according to Codrington (*The Melanesians, their Anthropology and Folk Lore*, p. 139) are also made to represent the ghost of a worthy man—*duka* being the name given to the ghost. These small stocks, which vary in size from 2 ft. to 3 ft., have on them carvings of fish, alligators, birds, etc., and are often decorated with painted designs in black and red and dusted with turmeric. They are actually taken on fishing expeditions to bring good luck and calm weather, and offerings of pig flesh are placed before them when the *duka* concerned is said to have cured a patient from sickness.

A house known as a *Mana duka* is built to store an even larger stock known as *Natopo* and made from a tree named *Nonemur*. These are decorated with black and white paint and carved with similar motifs, but they have an additional decoration of clusters of coconut leaves hanging from the top. Six of these posts are used to build the house, one at each corner and two main ones in the middle, these also are carved and painted black and white; the length of the posts vary according to the height of the house. These massive posts are said to belong to owners of sailing canoes. Occasionally the small stocks as illustrated are found standing around the two main posts in the middle of the house.

References to these posts are also to be found in *Ethnologia*, I and II, 1909 and 1916, and in Tolna, *Chez les Cannibales*, but I would gladly welcome any further information that will throw light on these very interesting but apparently overlapping cults.

THE NUMERICAL SYSTEM OF THE KRU. By Professor Melville J. Herskovits, Northwestern University, Evanston, Illinois.

148 The following numerical system was recorded some years ago by a native of the Kru tribe of Liberia, *Sie Ta-gbwè*, with whom research has been carried on with the primary object of making a phonetic and grammatical analysis of the language of the Kru. Mr. *Ta-gbwè*, who had been in the United States for some time, came to this country at about the age of eighteen years from *Gransess (Sikrekpò)*, Liberia, where he was born.¹

Kru, like so many of the West African languages, utilizes pitch-registers for grammatical purposes. These are indicated in the tables below by accents on the vowels, the pitch of every syllable being indicated. The system utilized is as follows:—

High, á; Middle, a (no sign); Low, â
High to middle, ȁ; High to low, Ȃ
Middle to high, ȃ; Middle to low, Ȅ.

Nasalization is indicated by a cedilla under

¹ This work has been made possible by means of funds granted for the purpose by Northwestern University. The linguistic analysis on which we were engaged was never concluded, however, owing to the unfortunate death of Mr. *Ta-gbwè*.

the vowel nasalized (a), a lengthened vowel by a dot after it (a·), an especially long one by two dots (a··). The vowels in the system below are pronounced as in Italian, the *e* being a close *e*, the *o* representing the 'aw' in such a word as 'awning.' The consonants, in the main, need no explanation. However, the *r* represents this sound with a decided single roll, *T* represents the medial *t* (between *d* and *t*), *W* the labialized *w*, *s*· the emphatic *s*.

In counting, the Kru may employ the numbers alone or prefix to each term the syllable 'dɛ' (thing), saying *mu* for 'five' or *dɛ mu* 'five things'; *wɛɛ mu*, 'one hundred' or *dɛ wɛɛ mu* 'one hundred things.' Since this process of prefixing involves no significant changes in the system, however, the following table of cardinals gives the numbers without the prefix:

| | |
|----------------------------|--------------------------|
| 1 = dɔ | 31 = wɛɛ na· pue na duɛ |
| 2 = sɔ | 40 = wɛɛ sɔ |
| 3 = Tɛ | 41 = wɛɛ sɔ na· duɛ |
| 4 = niɛ | 50 = wɛɛ sɔ na· puɛ |
| 5 = mu | 60 = wɛɛ Tɛ (or) wɛɛ sɔ |
| 6 = mu nɛ dɔ | na· pue na· puɛ |
| 7 = mu nɛ sɔ | 70 = wɛɛ Tɛ na pue |
| 8 = mu nɛ Tɛ | 80 = wɛɛ niɛ (or) wɛɛ Tɛ |
| 9 = spá· dɔ | na· pue ná· puɛ |
| 10 = puɛ | 90 = wɛɛ niɛ ná· puɛ |
| 11 = pue na· duɛ | 100 = wɛɛ mu |
| 12 = pue na· sɔ | 150 = wɛɛ mu ná· wɛɛ sɔ |
| 16 = pue ná· mu nɛ dɔ | na· puɛ |
| 20 = wɛɛ (or) pue·puɛ (or) | 200 = wɛɛ mu ké sɔ |
| dɛ· pue na puɛ | 300 = wɛɛ mu ké Tɛ |
| 21 = wɛɛ ná· duɛ | 400 = wɛɛ mu ké nɛ |
| 22 = wɛɛ na· sɔ | 500 = wɛɛ mu ké mu |
| 30 = wɛɛ ná· puɛ | 1000 = wu bwɛ |

It is at once apparent that we are dealing here with a quinquagesimal system; that six is five-plus-one, and so on. But the arrangement breaks down with the number nine, for here nine equals an unknown term plus one instead of the *mu na· niɛ* that would be expected. Again, there is a special term, *puɛ* for ten, instead of the *mu sɔ* one might look for. The special term for twenty, *wɛɛ*, is what one would expect; from this point the system moves smoothly and logically to the term for one hundred, where *wɛɛ mu* (five twenties) becomes the unit on the basis of which the system proceeds as before. For multiples of one hundred, the term 'kɛ' is employed, its translation being 'times.' *wɛɛ mu ké· Tɛ* is thus, literally, 'twenties-five times three.' The word *kpli* may be substi-

tuted for *kɛ* wherever the latter is used; their meaning is identical. At one thousand, again, the system incorporates a new term, *wu bwɛ*. This is the highest single number the Kru have, but multiples of it may continue the process indefinitely. For exceedingly large numbers 'may-be a billion,' to quote my informant, the Kru employ the term *kama kémɛ*, the literal translation of which is 'many many.' In counting rice, each term stands for three units, as three bundles of the grain are grasped at once, but this procedure is followed only with rice.

A point of some interest in this 'five-twenty-one hundred' system lies in the numbers used for twenty and multiples of twenty. Aside from the inclusion or the absence of the word for 'thing,' two terms are possible. Thus, in counting twenty, one would use *pue·puɛ*, or *pue na·puɛ* (ten and ten) rather than *wɛɛ*, although this term, with the change of the vowel to make it *wɛɛ*, is employed from this point onward. However, for twenty itself, *wɛɛ* is only utilized in describing objects, not as a member of a continuous series being counted.

There are only three ordinal numbers:

- first, *dji s·á lɛ* (literally, 'come-first')
 second, *ko ó· Bò* (literally, 'next-you')
 third, *Bwi Tɛ* (literally, 'little-again,' i.e., 'again a little').

Above three, ordinals are constructed in this fashion:

- 'my fourth child,' na dʒrú niɛ dju ná
 my children—four child this-one,
 'my fifth child,' na dʒrú mu dju ná
 my children—five child this-one,

and so on.

Fractions are designated by terms based on the use of the word *ti· tiɛ*, 'a part.' Hence the word for one-half would mean 'part-two,' for one-third 'part-three,' and so on. The full word is not utilized when employed for this purpose, but the particle 'ti·' derived from it is prefixed to the requisite ordinal number. A few examples of fraction may be given below as illustrations:

- $\frac{1}{2}$ ti sɔ $\frac{1}{3}$ ti Tɛ $\frac{1}{4}$ ti niɛ $\frac{1}{5}$ ti mu

This process is thus capable of indicating a fractional value of any given degree of smallness.

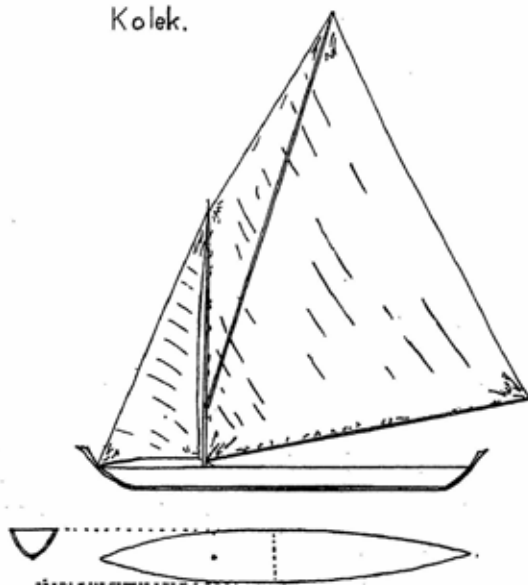
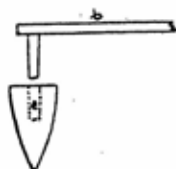
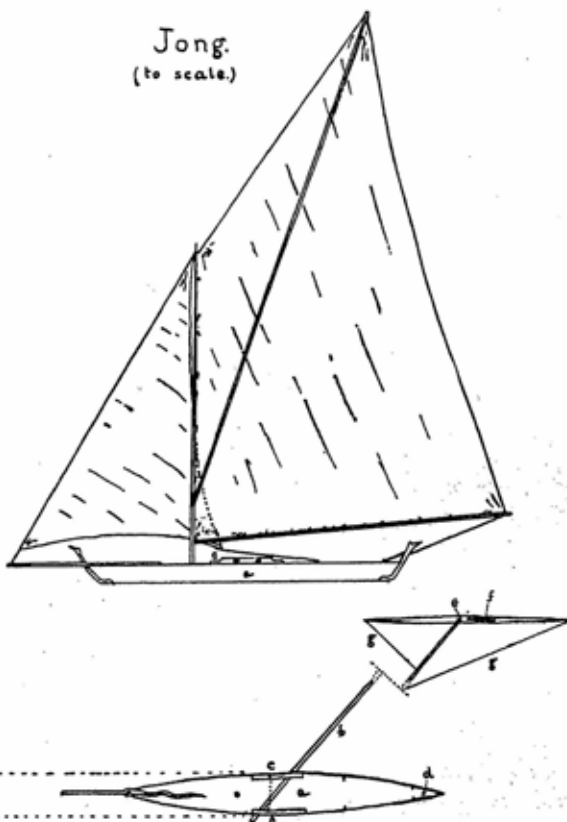
THE JONG (𨋢), A MODEL BOAT WITH AN OUTRIGGER FROM MALAYA. By R. T. D. FitzGerald. Illustrated.

149 I have in my possession a model Malay racing boat known as a *jong*, which is sufficiently interesting to merit description. I have so far been unable to find any written account of this boat, except in *J.R.A.I.*, Vol. L, p. 116, where A. C. Haddon mentions it and gives a drawing; also none of my informants

kolek is described by H. Warrington Smith in a pamphlet entitled *Boats and Boat-building in the Malay Peninsula*, Bombay Education Society's Press, 1906; and in an article under the same title in *Indian Antiquary*, Vol. XXXV, 1906, p. 97.)

The *kolek* is a long, narrow boat with no centre

Kolek.

Boom attachment
to outriggerJong.
(to scale.)

THE 'JONG,' A MODEL BOAT WITH AN OUTRIGGER, FROM MALAYA.

knows anything about its history, so I hope that some readers will be able to offer further information.

The sport of *jong* racing has existed in Johore, Singapore, and the Dutch East India Islands in the neighbourhood of Singapore for many years. *Jongs* exist only as models and resemble a full-sized boat called the *kolek*, which is peculiar to the southern side of the Malay Peninsula. (Sketches are enclosed for comparison. The

board, the weight necessary to keep the boat upright being supplied by the crew, who are supported round the body by a strap suspended from the top of the mast; the crew can thus lean outwards with their feet on the gunwale.

The *jong* occurs in three sizes which are used respectively by children, for sailing in calm waters, and for sailing in rougher and more open water or the sea. The hull is from $1\frac{1}{2}$ to 6 feet in length, roughly the same shape as that of the

kolek, and hollowed out of a single piece of very light wood until it is from $\frac{1}{8}$ to $\frac{1}{4}$ inches in thickness. Formerly there was no decking, but this has been added in recent years. The hole (d) at the aft end of the deck enables water to be removed from the interior of the hull. The mast, two-thirds forward from the stern, is the same length as, the bowsprit half the length of, and the sprit (which is suspended on a loop attached to the mast) one and threequarters the length of the hull. The bowsprit fits over the stem piece, half of it forming an overlap on to the deck and being ornamented either by having a *keris*-like shape or in some other way. As the hull is formed from one piece of wood the stem and stern-pieces are separate additions and do not form part of the keel as in the *kolek*.

The *kolek* is rigged with a sprit mainsail and a stay foresail; the *jong* has the sprit mainsail but the bowsprit enables the foresail to be replaced with a large jib, the lower border of which, when stretched taut, reaches aft of the mast, which has a considerable rake. *Jongs* sail best to the windward or with the wind on the beam; they do not run well before the wind. The mainsail of my *jong* has a boom, but there is a variety without the boom. The rig is similar to that found on some Thames barges and Dutch boats.

The *jong* is remarkable as being the only type of boat in the Malay Peninsula with an outrigger; the outrigger is peculiar in that it serves as a rudder besides taking the place of the crew of the *kolek* as ballast, thus permitting a large sail area and giving great speed. The outrigger boom (b), which is the same length as the sprit, passes through a slotted bracket (c) on the deck so that the outrigger lies aft of the centre of the boat and sometimes aft of the stern. The float has a hole (e) in the centre into which a tapered pin from the boom fits tightly. There is another and larger hole (f) in the float into which lead or clay can be inserted to serve as extra weight. When used as a rudder the float is set at the required angle and held there by diagonal struts of string (g) between it and the boom. When sailing the outrigger is always placed to the windward. A string may be attached from the top of the mast to the outrigger so as to reduce the strain on the boom attachments. Inserted booms are rare; they occur in the Sumatran

jellore and *ballelang*, according to Folkard, and in the *jong* mentioned by Haddon, where there are either one or two booms at right angles to the hull which fit into the side of the float, thus rendering it incapable of being used as a rudder. It might be noticed that the type of float attachment shown in the diagram would be either weak or difficult to make on a large scale, so this type may be an adaptation of the system by which the boom is attached to vertical spars fitted into the float.

As regards the non-existence of outriggers in the Malay Peninsula, Tweedie suggests that they would be impossible to use in this part of the world where most of the sailing is done in straits where there are great variations in the direction of the wind.

Haddon tells me that the only information he has of the *jong* is a short note in a letter. The *jong* he mentions is from Sarawak, has no deck, is heavy in shape, and is described as a schooner.

A glossary of Malay terms for various parts of the *jong* may be of interest.

| | | |
|--------------------------------|---------------|-----------------------------------|
| <i>Jong</i> ... | ... | Hull. |
| <i>Sa-oak</i> ... | ... | Stem and stern pieces. |
| <i>Tutup badan</i> ... | ... | Deck. |
| <i>Tertupai</i> ... | ... | Slot for outrigger boom. |
| <i>Julong-julong</i> ... | ... | Bowsprit. |
| <i>Tiang layer</i> ... | ... | Mast. |
| <i>Layer besar</i> ... | ... | Mainsail. |
| <i>Layer kecil</i> ... | ... | Jib. |
| <i>Sokong</i> ... | ... | Sprit. |
| <i>Tali dugang</i> ... | <i>kepada</i> | |
| <i>katey</i> ... | ... | Outrigger stay. |
| <i>Tali suai jib</i> ... | ... | Fore stay. |
| <i>Daman</i> ... | ... | Main sheet. |
| <i>Daman jib</i> ... | ... | Jib sheet. |
| <i>Katey</i> ... | ... | Outrigger float. |
| <i>Batang katey</i> ... | ... | Outrigger boom. |
| <i>Changkok</i> ... | ... | Pin connecting boom and float. |
| <i>Ukuran kemudi katey</i> ... | ... | Strut for setting angle of float. |
| <i>Perambut</i> ... | ... | Clew of mainsail. |

For my information I am indebted chiefly to Dr. Garlick, P.M.O., Johore, who in turn received information from Ungku Aziz, the Prime Minister of Johore, and also to Dr. M. W. F. Tweedie, Curator of Raffles Museum, Singapore.

My model is at present in the Cambridge Museum of Archaeology and Ethnology.

THE DOUBLE RAFT OF NORTH-WESTERN AUSTRALIA. By Rev. J. R. B. Love, Kunmunya. Illustrated.

150 The double raft, named by the Worora tribe 'kalum, also called 'pililim and mi'alba, is used by the Worora and Bad tribes, from the Prince Regent River to King Sound. The Worora extend from the Prince Regent Southwards to Collier Bay, while the Bad occupy the Islands of King Sound.

The Worora name the tree from which the raft is made 'kalum, 'pililim, or mi'alba, as they also name the craft. The tree is 'white man-grove.' The coast from King Sound northwards to the Prince Regent, and beyond, is fringed with mangroves and studded with small islands, the raft being used chiefly to paddle from island to island and the mainland. Though the coast northwards from the Prince Regent is similar to that where the double raft is used, the use of the double raft does not go north of the Prince

Regent, the tribes to the north of the Worora using a crude dugout canoe. Twenty years ago the dugout canoe was not known among the Worora, but now several of them have dugouts, made by themselves, so the dugout is extending southwards, and displacing the double raft.

The double raft itself consists of two separate rafts, each made of a number of tapering mangrove poles, of very light, soft wood (Fig. 1). The poles taper rather sharply, from the thickness of 6 inches or so at the butt to as little as an inch and a half at the tip, with the result that the small end of each raft of the pair is much narrower than the large end. One raft is larger than the other, the larger being at the rear and uppermost. To support the small end of the larger raft, the second, smaller raft is placed beneath and in front of it, the small ends to the centre and the larger ends to front and rear.

The larger raft may have from as few as seven to as many as a dozen poles, according to the size of the tree trunks used in making it; the smaller raft having several poles less than the larger one: length 10 feet to 12 feet. The mangroves are chopped down with the stone tomahawk, the bark is removed by hitting with a stone, and the butts of the poles are tapered rather sharply, probably to give less resistance to the passage of the raft through the water, at least in the case of the front one of the pair. The rear and larger raft is similarly tapered in all its poles.

The poles are fastened together with hardwood pegs, split by the stone tomahawk, and simply hammered through the soft wood of the poles with a stone, each pole being hammered on to the preceding one, with pegs at more or less irregular intervals.

On the upper surface and at the back of the rear raft of the pair is a little enclosure, made by hammering short sticks vertically into the poles. This is to contain small fish, tomahawk, and any small articles that the navigator may wish to carry with him.

In use the two rafts are simply super-imposed one on the other, the larger at the rear and above, the smaller in front and beneath. They are not fastened together when in use, but remain in position by their own weight and the weight of the man sitting on the upper raft (Fig. 2). One man can drag one of the pair to the water, and

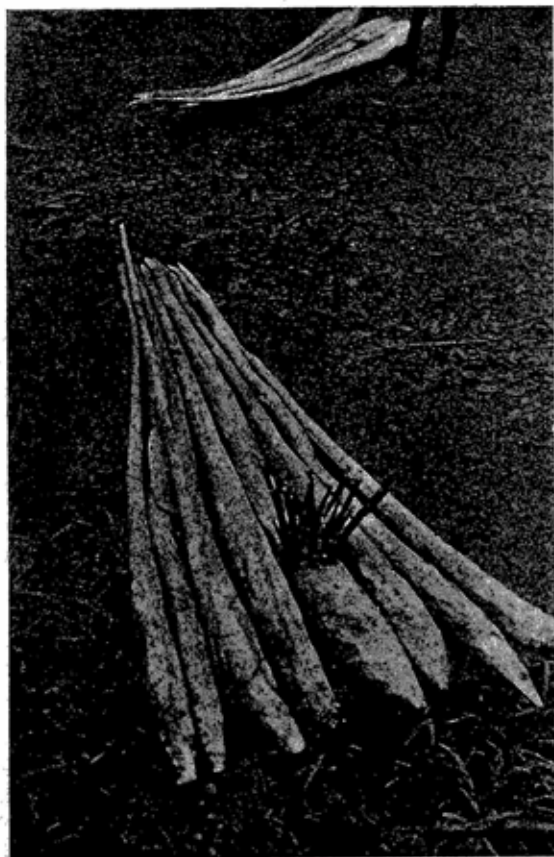


FIG. 1.—WORORA DOUBLE RAFT, OR 'KALUM DRAWN UP ON SHORE.

out of the water, by himself, so it is more convenient for him not to have the pair fastened together.

of the sea water on the bare skin is not regarded as an inconvenience. To paddle to an island on the double raft is not so exhausting as swimming,

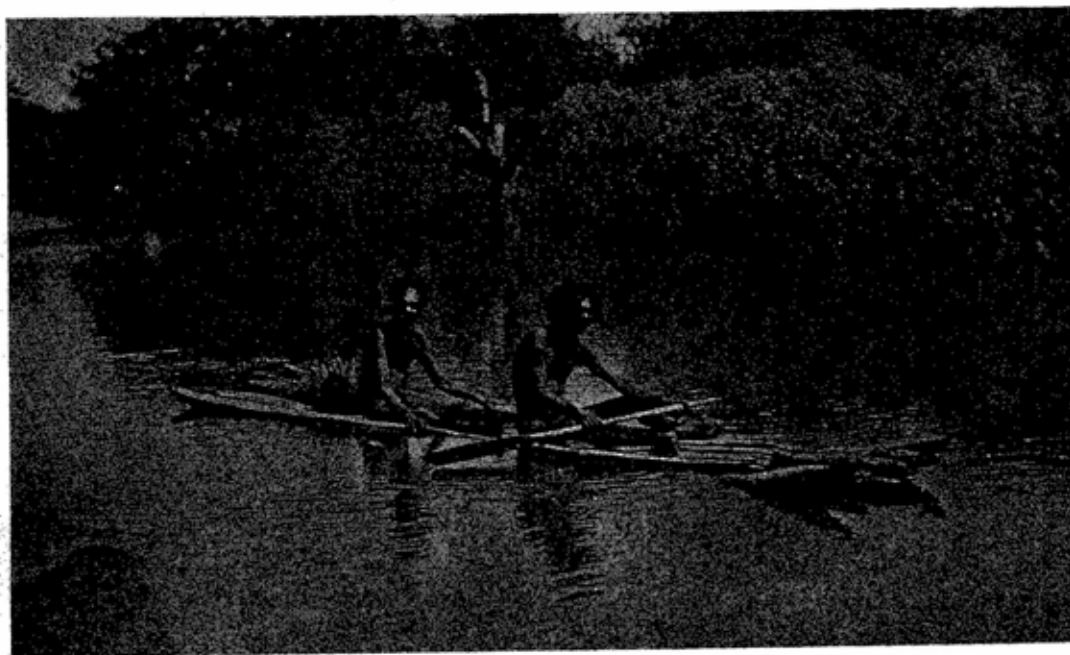


FIG. 2.—WORORA DOUBLE RAFT, OR 'KALUM.

When not in use the two rafts of the pair are either dragged out of the water separately and hauled above high water-mark, or, sometimes, the rafts may be temporarily anchored by thrusting the long wooden turtle spear between two of the poles, allowing the rafts to slip up and down the poles as the tide rises and falls. The spring tide in Hanover Bay (in the Worora territory), is recorded as forty feet, so the spear does not serve as an anchor-pole, except at the edge of the tide limit. One, or two persons, I have not seen more, may use the double raft. One paddler makes a few strokes on the same side, then reaches over and makes a few strokes on the other side. When two men are paddling, they paddle on the same side at the same time.

The position of the paddlers looks anything but comfortable, the legs stretched straight out in front, or knees bent and heels resting on the poles; in each case the paddler sits with his legs in front. While paddling, the sea water continually splashes up between the poles; so the paddlers are wet the whole time. As the sea is warm and the men do not go out in stormy weather, the splashing

and the raft is a conveyance for fish, turtle eggs, sea birds' eggs, yams, turtle or dugong meat.

The paddle itself is made from the stem and part of the spreading roots of the red mangrove. This particular mangrove has flattened processes at the butt, where the stem rises from the mud. By trimming off the processes, or ribs, except at two opposite sides, the Worora obtain a hand-shaped paddle that is very efficient.

The double raft is most commonly named 'kalum; the paddle is named *kalum'ban*; while a flat paddle-like implement, used for shovelling hot ashes and coals over yams in cooking, is named *'kalumbanja*.

The Worora never travelled long distances on the 'kalum, usually not venturing out of sight of land, and only to islands within clear view. The men however tell a story of a party of several men who paddled out to White Island, a rookery of 'boobies,' or gannets, to get eggs. White Island is not visible from the mainland. How these men knew of its existence and the eggs to be found there I cannot say. Perhaps they went on from small island to small island, till at

last they sighted this tiny island. They reached the island, got as many eggs as they could carry, but got no fresh water, and so exhausted were they when at last they got back to Augustus Island, from which they had started, that they all died.

During the disastrous big storm of March, 1935, when over 100 lives were lost from the Broome pearling fleet, one Worora man and his wife were paddling over to Montgomery Island from the mainland. They disappeared in the storm and no trace of them or the 'kalum' was subsequently found. Apart from this incident I have never heard of a disaster connected with the 'kalum'. It cannot sink; I never heard of

its turning over, nor of the pair of rafts becoming separated. The dugout canoe, which threatens to oust the 'kalum' is, on the other hand, easily overturned; nine adults and a boy being lost in the mouth of the Prince Regent when the canoe in which they were all packed was overturned in the swift tide-race. So the primitive 'kalum' may fairly be described as crude, not comfortable, but safe and efficient.

A typical specimen of a 'kalum', with paddle and turtle spear, was presented in 1936 by Mr. H. R. Balfour and myself to the British Museum, where it may be seen in the Ethnographical Gallery. (Reg. No. 1936.10.30.1.)

PROCEEDINGS OF SOCIETIES:

British Association for the Advancement of Science:
151 Dundee, 30 August—6 September 1939. Proceedings of the Section of Anthropology.

The Address of the President of the Section, Professor W. E. Le Gros Clark, F.R.S., dealt with the *Scope and Limitations of Physical Anthropology*, a branch of knowledge which had now passed through its initial phases of accurate description, definition, and classification into the maturer career in which museum work on necessarily restricted series of individual specimens begins to give place to what he described as 'field work,' with mass-observations on living populations, interpreted statistically and biometrically. Reviewing past work on the development of the Hominidae and their relations with the other Primates, he noted that new evidence now pointed towards long parallel development of related species and even 'convergence' of certain characters. The exceptional variations, even among the rare examples of early types—especially in regard to the head and face—concurred with observations on modern human varieties and breeds in suggesting that this variability was a specifically human characteristic, related to Man's remarkable capacity of acclimatization and adaptation to fresh circumstances of every kind. So far from having completed its task, in describing and classifying this widely varying material, anthropology was now equipped by that discipline for other aspects of functional and biological research, of fundamental applicability to questions now engaging public and administrative attention, such as liability to disease, or response to deficient or to appropriate nutrition, both among modern civilized populations and among the native peoples of all parts of the world. He noted especially recent work on these lines in China and in India, where the extreme density of population, and austerity of regional conditions, provided exceptionally instructive material.

A Joint Discussion with Section I (Physiology) on *Nutrition and Physique* was opened by Professor R. A.

Fisher, F.R.S., who argued that in Man's prolonged development nutrition was less influential than animal experiments suggested, and was more readily compensated. The response to increased nutrition was small, and not of permanent importance; though there had been a gradual increase in the weights and heights of poor English children during the past century. Dr. D. C. Wilson described nutritional observations on children in Indian communities in regard to signs of deficiency disease. Mr. D. M. Lubbock distinguished certain growth-patterns in the whole human population, again in relation to dietary habits, and discussed the alternatives of genetic and environmental (especially dietary) changes.

Dr. I. Leitch also dealt with the relative function of heredity and environment, illustrated by plant and animal experiments, and comparison of the resistance of fast-growing and slow-growing types to poor dietary environment.

Dr. S. Zuckerman discussed the *Evolution of the Human Brain* in comparison with ratio of brain size in other Primates. The basal structural pattern remains the same throughout the Order, and the inter-relation of surface to weight of the cerebral hemisphere and its parts. Anatomical evolution hardly parallels that of intelligent behaviour. Significant advances seem to be related to the development of speech and of a symbolic process.

Papers were contributed by Dr. R. Broom, F.R.S., on the *Affinities of the South African Pleistocene Anthropoids* and by Professor R. Dart on *Recent discoveries bearing on human history in South Africa*. Dr. Broom argued from the structure of the teeth of middle Pleistocene anthropoids to their closer relation to Man than to gorilla or chimpanzee: but these forms are too late to be ancestral to Man, and may be modified survivors of Pliocene apes of Africa and perhaps Southern Asia, from which family also Man may have originated. Professor Dart detected infiltration of the Boskop type northwards in the

form of Cro-Magnon Man. The Boskop and Bush pedomorphic types appear to be sex-linked with the modern Bushman. The Sterkfontein types resembled *Australopithecus*, and may be very primitive forms of humanity.

Dr. R. H. Thouless examined the *Mental Evolution of the Primates*, and Professor J. Murphy connected *Racial crossing and cultural efflorescence* on condition that the crossing shall not be between extremely different varieties, and that ten generations or 300-400 years shall elapse for the physical crossing to take cultural effect. His chief example was the efflorescence of genius in the ancient civilizations between the ninth and fourth centuries B.C.

Archaeological papers were few. Dr. A. O. Anderson reviewed the *Prospects of the advancement of knowledge in the early history of Scotland*, especially in the more exact establishment of texts, and more precise interpretation of their meaning. Study of ancient languages, especially Old and Middle Irish, is essential, and sound principles of historical evidence. These were illustrated by recent research on the ancient Picts.

Mr. Angus Graham dealt with some recent work of the *Royal Commission on the Ancient Monuments of Scotland*, and illustrated many varieties of chambered cairns, brochs, circles, domestic sites and cooking places, so called 'forts' and cultivation terraces, in Orkney and Shetland, the Commission's *Inventory* of which is about to appear.

Miss C. Fell discussed *Connexions between the Lake District and Ireland during the Bronze Age*; Dr. E. Estyn Evans described two seasons' work on *Lyle's Hill, an Irish hill-site of the Megalithic period*, in Co. Antrim crowned by a circular cairn built from debris of occupation-sites, with many flints and potsherds, and surrounded by a contemporary earthwork; and Mr. A. L. Armstrong announced *New Discoveries at Grimes Graves*.

Dr. P. Bosch Gimpera distinguished *Types and Chronology of Beakers in Spain*; of three periods and types, (1) classical style (Ciempozuelos-Alcores-Palmella, and lower Somaén) confined to the peninsula and exclusive of central and Portuguese cultures, (2) evolved types (Somaén II and Catalonia) reaching the Rhineland, Central Europe, and the Nordic passage-graves; (3) most evolved type with cord patterns (Los Millares) late aeneolithic, including Pyrenean, German 'corded' ware, Nordic cist-graves, Brittany, Ireland, and British B-beakers. Degenerate types, German, Dutch, and British A, correspond to Irish *lunulae* and Spanish pre-Argar culture. Eventually beakers exist only in Britain in most-evolved forms.

Folklore, especially Scottish, was well represented by Miss I. F. Grant on a *Highland Folk Collection*, Mrs. Catriona Mackintosh on *Hebridean Music and pre-Christian myths and legends in song*, Miss Maire McNeill on the *Folklore of Death Cairns*, Mrs. M. M. Banks on *Folklore of the net, line, baiting, and the boat in N.E. Scotland*; Rev. Canon J. A. MacCulloch surveyed *Some Scottish folklore and its*

origins from among various prehistoric peoples. Professor P. E. Newberry sent a paper on the *Crane Dance*; Mr. R. Kerr on *Wooden Teapots from Kongo Province, Tibet*; Prof. W. J. Entwistle, on *Ballads and tunes which travel*; Mr. W. Fogg on the *Wares of a Moroccan Folk-doctor*; and Mrs. N. K. Chadwick on *The Spiritual Journeys of the Seer*, examined in their geographical distribution and chronological relationship.

Professor E. O. James classified *Primitive Cults in the Religion of the Old Testament*, especially lunar and pastoral festivals, fertility rites and sanctuaries, treatment of the dead, sacred animals, divine kingship and the annual festival. Professor A. M. Honeyman discussed the *Change of Personal Name among the biblical Hebrews*, usually due to religious interest, but sometimes to political motives.

Sir Richard Paget, Bt., proposed the use of *Sign Language in the Education of Deaf Mutes*, and thought that his sign language, taught to all children would give better understanding of language generally.

The place of *Anthropology in Education* was discussed by Mr. N. F. Sheppard, who argued that with the advent of universal education there was risk that specialized study of the social tradition of one region and generation might arrest the natural development of society; anthropology would correct this by presenting the past primarily as source of data for the guidance of the future. Professor H. J. Fleure, F.R.S., referring especially to the university curriculum, urged that anthropology should become a subject of general culture, related to human geography, and evolutionary treatment of human affairs, among civilized as well as among primitive communities.

The early adjournment of the Dundee meeting led to abandonment of excursions, and curtailment of the programme of which the items are summarized above.

J. L. MYRES.

Anthropology and Ethnology in the University of 152 Freiburg, Switzerland.

In the winter semester of the University of Freiburg, 1939-40, Professor Dr. P. W. Schmidt will lecture on the *Beginnings of Human Society in Family and State*, on the *Earliest History of Mankind*, on *Ethnological Method*, etc. Since Professor Dr. H. Obermaier has also been lecturing for some time in the University of Freiburg, there is here the beginning of a centre for the study of primitive man which cannot fail, in view of the international reputation of the lecturers, to attract students from all parts; all the more so as it is expected soon to establish here also a representative of Physical Anthropology. It is hoped that besides Professor Schmidt, other members of the Anthropos-Institute, now engaged in field work in India, Malaya, and elsewhere, may lecture in Freiburg on their special subjects, and add to the importance of this new centre; the establishment of which will be sympathetically welcomed by ethnologists, prehistorians, and anthropologists already working in other Swiss Universities.

OBITUARY.

Thomas Wingate Todd, M.B., Ch.B., F.R.C.S.(Eng.):
153 15 January, 1885—28 December, 1938.

Thomas Wingate Todd was born in Sheffield, England, the son of James Todd, a Wesleyan Methodist minister, and Katherine Wingate. He attended Nottingham High School and upon graduation took professional training at Manchester University, graduating with first honours in 1907. While at the University he received several prizes and scholarships in anatomy, physiology, and surgery.

Upon graduation, Dr. Todd became demonstrator in anatomy (1907-8) and house surgeon at Manchester Royal Infirmary (1909-10). During the years 1907-12 at the University he participated in



THOMAS WINGATE TODD

the organization of courses in clinical anatomy, the curriculum leading to a degree in Dental Science, and courses in anatomy for art students and neurology for psychology students. During this time he arranged and catalogued the skeletal material recovered by the Archaeological Survey of Nubia, and undertook special work with Professors A. H. Young, G. Elliot Smith, and Arthur Keith. In 1912 Dr. Todd came to Cleveland, Ohio, as Henry Willson Payne Professor of Anatomy, and Chairman of the Department, a position he held until his death. In 1920 he became Director of the Hamann Museum of Comparative Anthropology and Anatomy, in the Department, and in 1929 Chairman of the Brush Foundation, affiliated with the Department.

During the War, Dr. Todd was Captain in the Canadian Army Medical Corps, 110th Regiment,

64th and 65th Batteries; Officer in charge, Surgery Base Hospital, Military District No. 1, London, Ontario; Consultant, Kinnel Park Camp, Wales.

At Manchester, Dr. Todd began the first of his many contributions to anatomy, studying the interrelation between skeletons and nerves, studies which were basic to research on the sympathetic nervous system. At Western Reserve University he began, in 1912, the collection of human, anthropoid, and mammalian skeletal material which became unique in the world: 3,000 mammalian skulls and skeletons; 600 anthropoid skulls and skeletons; 3,300 human skulls and skeletons, for each of which exact age, sex, stock (White or Negro) was known, in addition to valuable case-history data.

It was on the basis of this comparative and human material that Dr. Todd made his most valuable contributions to physical anthropology, centring about the theme of age-changes: appearance of centres of ossification, eruption of teeth, union of epiphyses, changes in the pubic symphyses, suture closure, and changes in the articular ends of long bones and in scapula and ilium. In addition the measurement of the cadavers, with corrections for tissue thickness, formed the basis of correlations between measurements on the bones and measurements of the living.

With these contributions as a background, Dr. Todd, in 1929, turned his attention to the living population, specifically the growth of children. The Brush Inquiry and Associated Foundations, under Dr. Todd's direction, undertook a long-term serial study of 4,000 children. Physical growth, skeletal and dental maturation and behavioural and mental expansion were studied in detail.

While conducting this programme, Dr. Todd carried on extensive researches in gastro-intestinal motility, wrote the section on the *Respiratory System* in Cunningham's 'Anatomy,' and at the time of his death was preparing a volume on clinical anatomy. His entire bibliography is over 250 titles.

Many honours came to Dr. Todd. Associate Editor *American Journal of Physical Anthropology*, 1918; Associate Editor *Child Development*, 1930; Associate Editor *Growth*, 1937; Editor *Child Development Abstracts*, 1932-33; Vice-President American Association of Anatomists, 1920-21, 1938-39; Vice-President Section H, American Association for the Advancement of Science, 1922, 1933; President American Association of Physical Anthropologists, 1938-39. He was a member of leading associations in medicine, anatomy, mammalogy and anthropology in the United States and Europe.

Dr. Todd is survived by Mrs. Eleanor (Pearson) Todd, two sons, Arthur and Donald, and a daughter, Margaret.

Dr. Todd's great contribution to anatomy and physical anthropology was the emphasis on the living as the proper goal of research. Not only did he initiate and carry on such a programme, but

he communicated the validity of such research to fellow-scientists and to lay public alike. His influence, deep-rooted, shall gain with the years.

WILTON MARION KROGMAN.

University of Chicago.

154 Thomas Wingate Todd, anatomist and anthropologist, was an old-fashioned anatomist in that he took every system of the human body as a field for his research; old-fashioned also in this, that his studies were not confined to the human body but embraced every mammalian form that could throw light on the human body.

He was anatomist rather than anthropologist; yet his labours on the growth and maturation of the human skeleton and on all phases of human dentition are of the kind which provide a true foundation for the science of Physical Anthropology. He found that most of our data relating to the sex differences in human skeletons, the times at which the sutures of the skull close, and at which centres of ossification appear and disappear, were based upon material which had been collected indiscriminately with no reliable histories of age, sex, and origin. Attached to his department in Cleveland was a museum recently erected by the generosity of a surgeon—Dr. C. A. Hamann. He began the assemblage in this museum of skeletons—each one of known age, sex, and origin; by 1933 he had 2,400 of them at the disposal of the group of workers that sprang up round him. He lived a very full life, his day in his laboratory beginning at 7 o'clock each morning, and it was with difficulty he was prevailed on to leave off when 6 o'clock arrived. Papers came streaming from his department; he was the author of over 450 original contributions to the literature of anatomy, anthropology and clinical medicine—for, at heart, Todd never ceased being physician and surgeon. A break came with the War; Todd came to Europe as Surgeon-Captain in the Canadian Forces. When he returned, he found that Dr. Alés Hrdlička had just brought out a new journal—the *American Journal of Physical Anthropology*. Todd and his school became ardent supporters; many of his own contributions and those of his pupils—among whom was W. M. Krogman, now of the University of Chicago, who did for the races of anthropoid apes the same service as Todd was rendering to human races, were published in its pages. Many of his papers appeared in our *Journal of Anatomy*, in the *American Journal of Anatomy*, and in the *Anatomical Record*. Others appeared in journals devoted to children's diseases and in dental publications.

Todd found that from birth to old age the human

skull and skeleton never cease to change; every decade registers its harvest in texture and shape. He became interested in the rate of maturation, especially in the circumstances which regulate the rate. This interest brought him to note the action of the various hormones which play on growing bones. By 1926 he had in front of him enough dead material to keep him busy even if he lived to the age of Methuselah; but dead material did not content him; he must have it living. He went out into the city, and thanks to the Brush Foundation, was able to establish an x-ray clinic where year after year the same group of children, born of well-to-do parents—and 800 in number, so as to get reliable means—were examined and the progress of their centres of ossification noted. The temporary effects of illnesses became very observable in these children. The expense involved in running such a clinic, and especially in supporting the ever-expanding needs of his College laboratory, became very heavy. He had to add the trade of beggar to his full day's routine and to raise money in the slump which surrounded him in 1929 was not an easy task, but he succeeded at the cost of a huge expenditure of energy and health. He formulated a vast scheme of publication—to bring out the results of his labours in a series of atlases. Alas! only the first has appeared; it was published in 1937 at St. Louis under the title *Atlas of Skeletal Maturation*. This volume contains 75 plates, each showing a stage in the ossification of the hand as revealed by x-rays. His aim was to provide other workers with a standard against which to compare their own observations. In due course the whole body was to be covered.

It may seem, from the hurried manner in which the course of his work has been narrated here, that his was but a 'laboratory life.' This was not so; his interests were wide; he was in sympathy with all that humanity values. Most of all he prized his home life, in which he was very fortunate. Every autumn saw his family and himself established in their shack at Muskoka, for he loved Canada and the Union Jack—and yet he was a citizen although he never legalized himself as one. He was a martyr to his inborn qualities. He had a high blood-pressure and enjoyed dissipating the energy which that condition of the blood seems to give. For years he suffered from duodenal ulcer, and latterly there was rendered the price which the subjects of high pressure have to pay—disease of the arteries—either of heart or brain. In his case it was the heart. He died in his study in the midst of his beloved records.

ARTHUR KEITH.

REVIEWS.

OCEANIA.

155 Inter-Racial Marriage in Hawaii. A Study of the Mutually Conditioned Processes of Acculturation and Amalgamation. By Romanzo Adams. New York: Macmillan, 1937. xx + 354 pp. Price 18s.

This study, one of several sponsored by the University of Hawaii on the peoples of the island and their social relations, is of unusual interest to every student of culture contact, for Hawaii (as the author says) has some of the characteristics of a laboratory. Its population

of British, Americans, Portuguese, Spanish, Chinese, Japanese, Koreans, Filipinos, Negroes from Porto Rico and elsewhere, have mixed for the last century and a half with the Polynesian natives, producing such a large mixed-blood contingent that there are now in the island, even officially, more part-Hawaiians than Hawaiians. It has been possible in this study to observe and record the facts of this intermixture in a way impossible anywhere else owing to the cardinal fact that intermarriage is not socially disapproved, so that there are few irregular unions, and ample statistics are available to show the nationalities of the partners in each marriage.

Mr. Adams gives a historical account of the influx of foreign labour in the island, due to the need for workers on the sugar plantations, for which the natives were both congenially disinclined and also insufficient, having decreased alarmingly with white men's diseases and the wars that followed Captain Cook's coming. Many of the imported Chinese returned to their own land, but in any case the influx appears to be over, and the preponderance of men to women is also gradually righting itself. In future it seems likely a 'population of Hawaiian birth will take the place of the present large 'population of foreign born,' as the mixed-blood inhabitants are now pretty well adapted to suit labour conditions.

There is no law against intermarriage in Hawaii, and public sentiment is not opposed to black and white mixture, or any other mixture. Mr. Adams examines carefully the reasons for this unique lack of social bias. He derives it from historical accident: the white men who first came to the islands were usually wandering sailors, not Puritan emigrés with families. These seafarers married Hawaiian women of chieftain status, and the half-caste's prestige for this reason was always fairly high. Native women liked marrying whites for the sake of the chairs and tables and domestic utensils of white culture; and there were scarcely any white women to arouse that sexual complex that finds violent expression in lynching. The missionaries from New England who came during the nineteenth century were anti-slavery and kindly disposed towards the dark-skinned. But, of course, as Mr. Adams expounds explicitly, the lack of economic reasons for keeping one race inferior was the cause of the lack of moral pressure. As no racial group was economically dominant and no skin-colour exploited for white financial gain, the social system found no reasons for moral disapproval. This book shows convincingly how inextricably woven are economic needs with moral sanctions.

Whatever some biologists may say on the beauty of racial purity, individuals in Hawaii flourish in this system of 'open classes.' Whatever his physical attributes, a man has equal opportunity for education, social and occupational success. Without the appalling onus of social and economic disabilities that oppress the half-caste elsewhere, the Hawaiian mixed-blood has (and will have) a chance of proving his intellectual worth and vigour. Mr. Adams is confident that the result will be an increasing homogeneity of culture, each succeeding generation will be more subject to the *mores* of the general population and not to any particular ancestral code, whether Chinese or American. He believes that the morals of the mixed culture now forming are as strong as those of any one racial group, even though the Chinese and Japanese still have a definite communal life of their own. In time, racial groups will give way, and 'the practical social problems incident to the contact of races will not have been solved, but they will have disappeared, thanks to the multiplication of hybrids and to their 'acculturation.'

A. B. V. DREW.

Education in Pacific Countries. By Felix M. Keesing. Oxford University Press, 1938. 226 pp. Price 8s. 6d.

156

The report of an educational conference covering all countries bordering, even remotely, on the Pacific, might not at first sight appear as material to be considered seriously by the social anthropologist. The conference was, however, organized by Dr. Felix Keesing, Professor of Anthropology in the University of Hawaii, who also compiled this report; and the scope of the preliminary studies, as well as the final presentation of the discussions, show a definitely anthropological approach. The co-operation of Dr. Loram and the Race Relations Institute of Harvard University further insured that human relations rather than educational technique would be the keynote of the conference, and the emphasis throughout was on 'understanding the human scene within which education operates, and evaluating the effects of educational 'experiments in the different areas.'

The outstanding importance to social anthropologists, of the material here presented, lies in its contribution to the difficult issues of culture-contact. Education is undoubtedly a more potent factor in changing native institutions, standards of living, moral codes and inherent values, than the apparently more direct attack by governments and economic enterprises. The frank admission by the conference, that 'when we institute 'a system of education we do not know precisely what 'we are doing,' will evoke an answering echo in the honest social anthropologist: 'we wish we knew precisely how 'to study the effects of education on native peoples.'

The problems set forward in this report, though mainly presented from the angle of the educationalist, are those which the student of culture-contact cannot evade. It is disturbing reading for the anthropologist; disturbing because it suggests additions to the already wide field of his subject, and forces him to find a technique and a place in his scheme of study for intricate relationships such as those between indigenous cultures, economic conditions, national renaissance, health and leisure, and linguistic developments. It is a death-blow to the hopes of limiting anthropological technique to the study of static and unchanged cultures. All those who intend to dodge culture-contact and its attendant difficulties—keep away from this book!

Among the many important issues raised in this report, special attention should be called to the discussion of racial abilities and racial attitudes in education; to the national renaissance which has developed as a result of higher education in certain areas; to the significance of the rise of new sects and prophetic movements; to the aims and methods of mass-education experiments; to vocational training in relation to the satisfaction of economic wants; and to the lack of opportunities for 'education for leisure.' One of the subjects discussed, which was perhaps of most direct anthropological bearing, was the relation of educational systems to indigenous cultures, which were described as a 'rich accumulation of human invention and the 'indispensable tools for effective education.' The conflict was well brought out between a sentimental veneration for all that was of the past, and a ruthless cutting at the roots of former social institutions, economic systems, religion and morality. The anthropologist is generally accused of weighting the balance in favour of the past. At this conference it was agreed that he could be of great service to educationalists in helping them to learn more about indigenous cultures, especially about the inter-relation of social, economic, legal, and religious bonds, which knit the community together. The challenge latent in this book, however, is that the

anthropologist should concern himself with the present conditions of changing cultures, and that he should be able, in the light of his knowledge of indigenous social structures, to assess and analyze the phenomenon described as 'bi-culturalism'—that 'Janus-like look to the past culture of a people as well as to the future.' Ultimately the practical uses of anthropological science depend upon the acceptance of this challenge, and we are grateful to Dr. Keesing for bringing out so clearly, in this most readable report, the essential implications for social anthropology to-day. MARGARET READ.

Philippine Pagans: The Autobiographies of Three Ifugaos. By R. F. Barton, M.Sc. London: Routledge, 1938. 271 pp., 24 illustrations, 2 sketch maps. Price 15s. net.

The author, who was a schoolteacher-ethnographer among the 'non-Christian' Ifugao in the period 1908-15, made a new field trip to this people in 1937. These 'primitive documents' are part of his garnerings, and represent in their published form an interesting experiment in presenting cultural data. Three individuals—a leading priest, an old woman who in the opinion of the community had led a more eventful life than any of her contemporaries, and a man of poor parentage—were persuaded (with pay) to 'tell the things in their lives' that they considered the most important. A free translation has been made of their accounts, as recorded with an interpreter, and the author includes his own occasional promptings, also plentiful explanatory notes, and in one or two places the native text. A 21-page characterization of Ifugao culture opens the book; each autobiography is preceded by a brief comment on the informant; and a closing section covers an incident in native life which is presented in the form of an 'examination' to see how far the reader has placed himself *en rapport* with the 'attitudes, motivations, and behaviour' of Ifugao culture.

The author's prime aim has been to supplement his more formal data (as in his earlier studies of law and economics) by showing how the culture looks through native eyes. Granting that there are a number of defects—most of which he points out himself—the experiment succeeds to a remarkable degree in revealing the fundamentals of Ifugao life. Without having the full detail, or even any balanced picture of the culture, the reader cannot but sense the essential features of Ifugao childhood and adolescence, kin and locality groupings, sex and marital arrangements (invaluable for the theorist in this field), economic ideology, feuding and headhunting, rules, beliefs, and rituals. The book will be welcomed by all students of primitive behaviour, and adds to the all too rare number of sources from which a genuine 'inside' view can be obtained of societies other than our own. FELIX M. KEESING.

The Mountain Arapesh. By Margaret Mead.

158 This monograph describes part of the results of an expedition to the Mandated Territory of New Guinea in 1931-2.

In the first part Dr. Mead gives a general sketch of the material culture of the Mountain Arapesh, and compares it with that of the neighbouring Beach Arapesh and Plains Arapesh.

These tribes, and their neighbours, differ from most savages in that their culture is in a state of chronic

flux; traits acquired, usually by purchase, from neighbouring tribes, are continually ousting those already possessed. It does not appear, however, that any of the traits acquired, except from Europeans, are really new; they have their day, are passed on or forgotten, and years later are reacquired. Some hamlets carve wooden bowls, others do not, but in the former 'the carving of bowls may be abandoned, the adjacent hamlet, which had never made bowls, may begin to do so' (p. 166).

Function seems to play little part; the women have borrowed the plaited belt which elsewhere supports the apron, but wear it merely as an ornament (p. 212).

The ceremonial feast, elsewhere an occasion of rejoicing, is to these poverty-stricken people a cause of worry and frayed tempers (p. 219).

In the second part of the monograph Dr. Mead gives a detailed description, with many text figures, of the methods of making houses, baskets, clothes, traps, etc. Bows and pots, though extensively used, are all imported (p. 317).

On p. 313 Dr. Mead figures a spear with two parallel blades. This is interesting, since Dr. Lindblom, who has made an intensive study of such weapons, knows of no example from the South Seas. RAGLAN.

South Sea Folk: A Handbook of Maori and Oceanic Ethnology. By Gilbert Archey. Auckland War Memorial Museum, 1937. 59 pp.

159 This Handbook, by the Director of the Museum, first gives a useful description of the peopling of New Zealand, and an account of Maori material culture in its social setting, especially in connexion with economic life, recreation, religion and warfare. A number of text figures illustrate common motifs in Maori carving, and nine plates give some indication of the magnificent collections which the Museum possesses. Further sections, illustrated by two plates, discuss the remaining Polynesian and Melanesian material, with a short note on those from Micronesia. The Handbook is valuable for other than museum visitors. An occasional ethnological generalization, however, is open to question. Thus Tikopia and the Reef Islands were almost certainly populated, as far as the Polynesian elements are concerned, by drift voyagers from the east, and are not, as stated, communities left behind by the original eastward migrating Polynesian stream from Indonesia. R. F.

They call them Savages. By Alella Lewis. London: Methuen, 1938. xiv + 264 pp., many illustrations. Price 8s. 6d. net.

160 This is a lively account of the visit of a young artist from Sydney to American Samoa, primarily in search of subjects for paintings—which were found in profusion—but eventually to make the close acquaintance of the natives, to live their life so far as a visitor could, and to set down a straightforward and most enjoyable record. Miss Lewis owed much, before setting out, to the monitions of Dr. Margaret Mead and Professor Radcliffe Brown; and in the first days, to the kindness of American officials, of whose dealings with the Samoans she gives a most favourable impression; much also to the perfect courtesy of the chiefs in whose homes she stayed and to the women who received and escorted her; but most of all to her own happy temperament and varied accomplishments. Her modest account of a real adventure is as graphic as the sketches which adorn it are eloquent. J. L. M.

GENERAL.

Relaciones de la Sociedad Argentina de Antropologia. I. Buenos Aires, 1937. 208 pp., plates and text illustrations.

161 The recently founded Anthropological Society of Argentina has produced already a valuable record

of its work, including excavations on prehistoric sites, a review by Professor Imbelloni of anthropological classifications in the light of 'blood-groupings,' and a description of remarkable monoliths, with human figures and other objects in low relief, from a habitation site

at Mocachi. Such a review of current work in a large and hitherto ill-explored region is very welcome. J. L. M.

Verzeichnis der periodischen Schriften der Bücherei der Gesellschaft für Erdkunde zu Leipzig.
162 XI. By Helene Müller. Leipzig, 1938. viii + 163 pp.

This valuable catalogue includes separate lists of publications of societies, journals issued by publishers, proceedings of congresses (very imperfect) an alphabetical index of the contents of those lists, and a list of countries and cities represented. Most of the items are geographical but anthropology, meteorology, geography and kindred subjects are included. J. L. M.

Fragments from Babel. By Professor John Dynely Prince. New York, Columbia University Press, 1939. 222 pp. Price 14s.

This volume celebrates the author's seventieth birthday and illustrates the width of his scientific interests, Sumerian and Akkadian; Tatar, Slav, Celtic and Teutonic; and the archaeology and linguistics of Algonkin peoples.

A very curious note concerns the speech of a band of gypsies, born in the southern states of North America, but of Brazilian extraction, who came to Belgrade from South Africa in 1929 and were sent back thither through the good offices of Dr. Prince, then United States Minister to Yugoslavia. To complete the story, their gypsy dialect was essentially Roumanian.

From his wide experience of written and spoken languages, Dr. Prince adds a valuable note on the principles of linguistic teaching and a comparison of European and American methods. Though all these articles are reprinted, their separate appearance here will be welcome to the author's many friends; and the bibliography appended to the volume will recall many other contributions to learning. Not many professors, and fewer diplomats, have such a record of published work: and the end, we may hope, is not yet. J. L. M.

General Anthropology. Edited by Franz Boas. New York: D. C. Heath & Co., 1938. xi + 718 pp., 97 figures, 10 plates.

At a time when the necessity for specialization tends to obscure the broader aspects of anthropology for any fresh student of the subject, this book is of the greatest value not only to anthropologists but to archaeologists, geographers, and others needing a general outline of an allied subject. Of fifteen chapters of uneven length the editor contributes six and a half himself, as well as a brief but adequate introduction outlining the subject and purpose of the volume. A chapter (I) on the *Geological and Biological Premises* by N. C. Nelson (who also contributes Ch. V, *Prehistoric Archaeology*) and by the Editor respectively, is followed by *Human Origins and Early Man* (II) by James H. McGregor, *Race* (III), *Language* (IV) and *Invention* (VI) by the Editor, *Subsistence* (VII) by Robert H. Lowie, *The Economic Organization of Primitive Peoples* (VIII) and *Art* (XI) by Ruth Bunzel, *Social Life* (IX) by Gladys A. Reichard, *Government* (X) by Julius E. Lips, *Literature, Music, and Dance* (XII) and *Mythology and Folklore* (XIII) by the Editor, *Religion* (XIV) by Ruth Benedict, the volume being concluded by the Editor again with a short chapter (XV) on *Methods of Research*.

The extremely wide field covered in this book is sufficiently indicated in the chapter headings, though here and there a slight alteration would better indicate the contents. Thus *Philosophy* rather than *Organization* would fit the content of Ch. VIII, and *Legal Conceptions* rather than *Government* that of Ch. IX, which is con-

cerned more with fundamental ideas than with the machinery of their implementation. This is in itself indicative of the limits which the authors have of necessity set themselves in order to remain in the compass of one volume, and in any assessment of its value both the advantages and the difficulty of doing this must be borne in mind.

It is inevitable that a work of such scope by so many hands should show traces of unevenness, but the standard maintained is extraordinarily high, and the overlapping of subject-matter negligible. The approach is sometimes brilliant, is almost everywhere fresh, and is kept admirably objective from beginning to end. The chapters on *Invention*, on *Art*, but most of all perhaps on *Subsistence* seem particularly happy; the chapters on *Government* and on *Religion* perhaps the least so. That there should be some controversial matter included is probably inevitable. Thus we doubt whether physical anthropologists in general will accept the Editor's heretical statement (p. 115) as to changes of cephalic index caused by environment in a single generation; and surely the occasional freakish melanism of the panther is in a different category from the specific blackness of the principal Indian bears (p. 109). The suggestion that the cave art of India (p. 199) is to be regarded in a similar light to that of palaeolithic Spain is not one that inspires any confidence, particularly if Mitra's *Prehistoric India* is cited as a serious authority. Shell heaps are said to be reported in the Indonesian area from Formosa only (p. 202); but considerable antiquity has been claimed for those in the Andamans. There is some evidence to suggest that the subsidence of south-east Asia which produced the Malay Archipelago (p. 201) is more recent than has been presumed, vide Molengraaff and Weber on the freshwater fish of that area, and Corbet and Pendlebury on the butterflies. Surely it is incorrect to say that "except in Madagascar" (p. 202) megalithic monuments are no longer produced? Nias at any rate was producing something of the kind within the present generation, and Assam, which in many respects is a cultural outlier of that area, is still producing rude work of the kind. It is surely erroneous to say that the *kula* valuables are not ornamental (p. 366), at any rate in the eyes of their wearers; they are described by Malinowski (*Argonauts*, p. 87) as "primarily ornaments." Headhunting is not predatory (p. 396) in the strictly economic sense, as what is coveted is not the neighbour's goods but his life-material. Two boomerangs appear (p. 243) over the caption 'Australian boomerangs,' but the lower of the two is unmistakably American, probably Hopi. It is not strictly accurate to describe the fire-plough as "confined to the islands of the Pacific Ocean" (p. 240), as rare cases of its use have been reported from Australia, Africa and even America.

No apology is needed, perhaps, for pointing out minor slips of this kind in a work which will so obviously reappear in subsequent editions. The great majority of points, however, which seem to call for criticism, are due to one more or less consistent fault. Although instances are widely drawn from America, from Africa, from Australasia, and from northern Asia, south-east Asia, which harbours both on the mainland and on its islands a very large number of primitive tribes, is generally ignored. Occasional references are made, it is true, to the Todas and to the Veddas, and to certain tribes of the Philippine Islands, but with the tribes of central India, Burma, Assam, Malaya and Borneo, for instance, the authors seem unacquainted. Hence no doubt arise such misstatements as that instruments of the violin type "do not seem to occur among primitive people" (p. 605); that "absolute limitation of resources [as among the Ifugao or the Quiché Indians] is extremely

"rare" (p. 344); that the cultivation of land "does not in itself create ownership," although in point of fact all over the hill tracts of Assam at any rate the conversion of virgin forest into cultivation or the construction of irrigated terraces out of dry slopes, that is to say the cultivation of land where that involves more than ordinary labour, can be seen in the process of giving private title to land previously held by the community or by its chief. So again the basis of prestige in the Plains region of North America (p. 462) is closely analogous to that found in many headhunting tribes of south-east Asia and of Indonesia, and cannot therefore be regarded as unique. To take another instance, our concept of dowry is approached far more nearly in the Angami custom of *mengu* than by the Ifugao custom cited on p. 382 (and cf. p. 442) as exhibiting the nearest approximation. A good deal of light on the significance of bride-prices is probably to be had from the customs of the Kuki-Chin tribes of Assam and Burma, in particular from their inheritance customs and from their payments of 'bone-prices,' while in the India-Burma area cases where there has been a change from matriliney

to patriliney must be frequent (p. 424). The fertility cults of this area, which underlie both the 'Feasts of Merit' and headhunting go unmentioned, as do the analogous 'soul-stuff' concepts of Indonesia and New Guinea, although a passing mention of the Kai tribe occurs in the chapter on Religion itself. It was no doubt lack of space that ruled out any treatment of eschatology, a not unimportant aspect of religion; taboo may have a positive aspect, as in the Irish *geas*; a fetish may be the focus of impersonal power; *mana* in its Polynesian as distinct from its Melanesian aspect has something about it which is almost ethical, while the distinction that Dr. Benedict draws between the religious technique based on an attitude towards things, and that based on behaviour towards persons, ingenious as it is, is almost certainly fallacious.

These, however, are perhaps side issues at which it would be unfair to cavil. The presentation as a whole has been not only well proportioned but, within its compass, amazingly comprehensive. Few teachers or learners of anthropology can afford to be without this admirable survey. J. H. HUTTON.

CORRESPONDENCE.

The Meaning of the Cowrie-shell.

165 SIR,—There appears to be a certain amount of misapprehension as to the meaning of the cowrie-shell. The idea that it is essentially a female charm is founded on the supposed likeness between the human vulva and the opening of the shell when set upright. Little account, however, has been taken of the occurrence of the cowrie as a charm for the male, or of the psychological fact that women almost invariably keep sex-charms hidden.

The cowrie is, and always has been, worn by men and other male animals as frequently as it has been worn by women. The shell is actually a charm against the Evil Eye on account of its resemblance—when seen horizontally—to a half-closed eye, the indentations at the mouth of the shell representing the eye-lashes. As the Evil Eye can affect the reproductive organs of both sexes, the cowrie may be worn for their protection in the same way as any other charm. But that it was not supposed to protect the genitalia only is shown by the fact that it is placed on all animals, regardless of sex, and on mules and geldings. Bridles, on which the whole ornamentation is of cowrie-shells, are used for stallions (horses, camels, asses), for geldings, for mules, for bulls, and for bullocks, in all parts of the East and Near East.

Early occurrences of the cowrie as an ornament or charm are as frequent in men's graves as in those of women. This is markedly the case in ancient Egypt. The usual position to wear it is where it will catch the first glance of the Evil Eye, which is always supposed to constitute the chief danger. If the first glance falls on an inanimate object, especially if that object is in the likeness of an eye, the danger is averted.

The psychological reason for wearing such charms must not be disregarded, and the difference between the sexes in this respect should be noted. To the man his own protection is of paramount importance. The wearing of the *fico*, which is essentially a male charm, indicates this; he requires protection when comparatively helpless in the act of coition. The male genitalia, being external, are considered as peculiarly liable to witchcraft and other evil influences; the charms are therefore worn openly where they can be seen. The female genitalia are internal

and therefore hidden, they are secret and unseen. Charms for their protection cannot be worn openly; they must be hidden and secret likewise. Again, the act of coition, which to the man is only a passing pleasure, is to the woman the beginning of something more important. She has to be protected, not only during the act, but during the months that follow, not for herself alone but for the life which comes from the act. The charms that she wears must be more powerful than those of the man, and must be hidden, lest witchcraft and the Evil Eye should be more potent than the outward objects. Hidden against her person, never removed and never shown, they could not be sterilized by magic like an external charm. The theory is, apparently, the idea that what the eye does not see, the heart does not grieve over; and a hidden charm, whose existence is unknown to the witch, and is unseen by the Evil Eye, has peculiar power.

The cowrie, which until the last few years has been used as a form of money, could never have been so used, had it been regarded as representing the vulva. All anthropologists know that there exists a feeling of repulsion among most Eastern and early peoples against touching a woman's genitalia with the hand; even the representation would not be touched. Consequently cowries could never have been handled freely as a means of barter had they been regarded as a form of the female organ. But if they were (as I have tried to show) emblems of the eye as a charm against the Evil Eye, their use in barter would be easily understood, as preventing bad luck in buying and selling. M. A. MURRAY.

Pottery from the Mumbwa Cave, Northern Rhodesia.

Cf. MAN, 1939, 63.

166 SIR,—In Dr. Wells' article (MAN, 1939, 63) on the ceramics from the deeper levels of the Mumbwa cave, Northern Rhodesia, the following points should be made clear:—

1. The local tribe are not Baila. The nearest Baila are some 12 miles to the south of Mumbwa and they are very much mixed with their neighbours. The local people are Balenge and Baluba. The Baluba are the same, for all practical purposes, as the Bakaonde.

2. The description of the pottery given by Dr. Wells compares exactly with present-day Bantu pottery at Mumbwa and in Northern Rhodesia generally. Some of the specimens illustrated I could duplicate from the flower pots on my verandah here and all of them, with the exception of the bead, and probably the cord-impression, could be found in the villages round this station.

3. For pots from which several of Dr. Wells' sherds might have come, see Smith and Dale, Vol. I, p. 195; with triangular motive as Wells, Plate E, Fig. D.

Some time ago I published a description of pottery-making at Mumbwa (*Nada*, Dec. 1938, p. 63). I cannot remember having seen string used to make ornamental impressions on pottery. The clay bead is new to me.

I myself made the first excavation at the Mumbwa cave (*Nada*, Dec., 1926, p. 67). I did not find any pottery except in the surface layer of the deposits.

From what I have seen I think it is likely that pottery was made by some of the latest Stone Age people of this country. I am not making adverse criticism but only stating facts that may help investigators.

Lundazi, N. Rhodesia.

F. B. MACRAE.

The Nokrom System of the Garos of Assam.

167 SIR,—In his article on 'The Nokrom System of the Garos of Assam' (*MAN*, 1936, 54) Mr. J. K. Bose remarks that "curiously enough, no reference has been made about such an important custom as this in the classical monograph on the Garos by Major A. Playfair." This statement is not correct.

In dealing with the exceptional cases where the girls do not choose their own husbands as is normally the case Playfair states that "This exception occurs when one daughter of a family is given in marriage to the son of her father's sister. . . . The daughter's husband becomes his father-in-law's *nokrom*. . . . When the girl is thus given in marriage to her cousin, the couple take up their abode with the former's parents. At the death of his father-in-law the *nokrom* marries the widow, thus assuming the anomalous position of husband to both mother and daughter."—Playfair, *Garos*, p. 68.

Again, discussing the question of the inheritance of property, Playfair remarks that "In order that the control shall not die out in the event, for instance, of the husband's death, he has the right to choose a male member of his clan to represent him. This representative is known as *nokrom*. He is not an heir, for as a male he cannot inherit, and the person whose *nokrom* he is has nothing to leave; but he is the channel through which the 'motherhood' of the husband maintains its hold on the property of the wife. When possible, this *nokrom* is the son of the man's sister and he is expected to marry his uncle's daughter and the widow also when his uncle dies. In the event of there being no sister's son, a male member of the man's *machong* (motherhood) is adopted as *nokrom*. . . . He marries one of her daughters, takes up his abode with her people and becomes responsible for his adopted family as soon as its natural protector can no longer provide it. With the advent of the *nokrom*, it may be said that a dual control is exercised over all property. . . ."—(*Garos*, pp. 72-73.)

In another place Playfair writes that "Before taking a second wife it is customary for a man to obtain the

"permission of the first. . . . The chief wife is called '*jik-mamung* or *jik-mongma* (the first name means 'principal wife' and the second 'elephant-wife')' and the others are known as *jik-gite* which is equivalent to 'concubine' . . . but *jik-mamung* takes precedence of the others. When a man marries his uncle's widow she is always *jik-mamung* even though he may have married her daughter before her."—(*Garos*, p. 69.)

From the above quotations it will be clear that Playfair as early as 1909 not only mentioned, but described in all its essential features, the *nokrom* system of the Garos. It is rather surprising that Mr. Bose should be unaware of the occurrences of these passages in Playfair's work. One would have thought that he had not read Playfair at all but the similarity between Playfair's and his language in some places and in one case almost verbal identity suggest otherwise. Compare, for instance, Playfair's sentence, "The chief wife is called *jik-mamung* or *jik-mongma* (the first name means principal wife and the second elephant-wife)" (*Garos*, p. 69) with Bose's statement running as follows: "She is known as *jik-mamung* or *jik-mongma*; the first name means 'principal wife and the second, elephant-wife.'"—(*MAN*, 1936, 54.)

R. R. MOOKERJI.

Indian Museum, Calcutta.

The Psychology of the 'Gegen-Typus.'

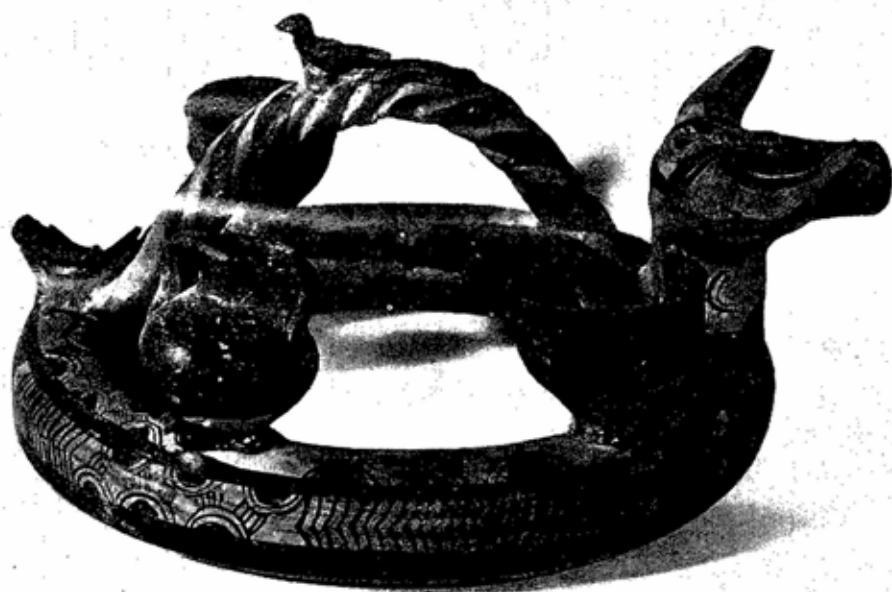
168 SIR,—It is the business of an ethnologist to understand other folk's ways of thought. This is my excuse for calling attention to a recent manifesto of a belief which appears to have become popular, if not authoritative, in certain countries. The author is Dr. E. R. Jaensch, the title 'Der Gegentypus'; it is published in Leipzig, and its subtitle may be translated as follows: 'Psycho-anthropological principles of a German philosophy of civilization, setting out from that which we want to overcome.' It is acclaimed as crowning the author's life-work in racial psychology, and establishing this 'philosophy' on exact psychological foundations.

Apparently there are, for this 'philosophy,' two main sorts of people, J-types and S-types. The J-types are 'biologically valuable'; it is believed—by J-folk—that they correspond with the 'races' which compose the German people. Their 'opposites,' the S-types, are *Auflösungstypus*, 'dissolute' in the literal sense. Jaensch explains these unfortunates as the results of the liberalist and individualist culture of the post-war period, through mixture of breed, the ravages of tuberculosis and other diseases, and the perversion resulting from unhealthy town-life. But surely there were S-types before 1914.

Jaensch asks whether these types are to be considered as biological variations arising through mutation. He notes that even J-types are liable to be overlaid with an 'S-structure' at the 'difficult ages' about 4 years and 11 to 14; even J-kiddies, it seems, have an 'awkward age.' These manifestations, however, are transitory, not biological types, whereas J-types are the real thing.

The practical problem, for J-folk like Dr. Jaensch, is how to 'overcome' the *Auflösungstypus* and the culture which it perpetuates. The best hope is for a 'creative synthesis' of types J, and J₂; beware, however, of the 'ostische Rasse,' which is contaminated and liable to become 'dissolute.' We have only to look at recent 'race-maps' to see what this means; and to await that liquidation of the S-folk which is the political corollary of J-philosophy.

J. L. MYRES.



1. (C 7104).



2. (C 7105).

A LATE-MYCENÆAN 'KERNOS' OR LIBATION-VASE.

Photographs by the courtesy of the Museum of Fine Arts, Boston, Mass.

MAN

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ORIGINAL ARTICLES.

Technology

With Plate L.

Myres

A 'KERNOS,' OR RING-VASE, IN THE MUSEUM OF FINE ARTS, BOSTON, MASSACHUSETTS.
By Professor John L. Myres, F.B.A., New College, Oxford.

169 The curious vessel shown on Plate L was bought about 1922 in Smyrna, but it is probably (but not certainly) from Cyprus. This type of vessel occurs rarely in the equipment of Cypriote chamber-tombs, from the Early Bronze Age (*circa* 3000 B.C.)¹ to the Early Iron Age (*circa* 800)². There is much variety in detail; but essentially the body is annular, usually (but not always) hollow, like that of contemporary annular flasks.³

On this as platform, and usually communicating with its cavity by holes in their bottoms, are miniature vases of various shapes, together with human figures; and sometimes an animal's head serves as a spout. The ritual function of these 'kernos'-vessels, to pour liquid offerings, is indicated by the human votary, who plays the lyre (*Cesn.* No. 899) or wears a ram's-head mask (*Cesn.* No. 521). Sometimes the whole vessel can be lifted by a transverse handle (*Cesn.* No. 522).

This Boston example (Plate L. 1, 2) is of common buff-coloured clay, with decoration in black paint slightly glazed. It has an annular body, a bull's-head spout (with three perforations) rising from it, and five vessels arranged on its upper surface, one of which is broken, and one entirely missing, though its position is indicated by an orifice in the annular body, surrounded by a wide border of paint. Two of the vessels are deep bell-shaped bowls with slightly flaring rim, rather like the profile of the 'granary-class' of Late Minoan mixing-bowls (*kraters*) from Mycenæ and their contemporary Cypriote counterparts common at Enkomi, Curium, and elsewhere.⁴ The damaged bowl seems to have been similar; and the fourth is a vertical-handled amphora, of a type common throughout the Early Iron Age in Cyprus and other Greek regions. All the vessels have perforations passing into the annular conduit, which could be filled through these and emptied through the bull's nozzle.

From the back of the bull's neck to the opposite point of the ring-body passes a curved handle, twisted in the rope-like fashion characteristic of jugs (*amphoræ*) and amphoræ of the Early Iron Age, but also found both earlier and later in Cyprus.⁵

On the highest point of the handle sits a dove, on a platform which has room for a similar bird back to back with it, and traces of such a bird. The diameter of the vessel is 26.7 c.m. The buff, dusty clay and umber paint are characteristic of the Late Bronze Age and Early Iron Age in Cyprus. A glazed paint was intended, but the porous clay has absorbed much of the colour, as often happens in this and similar fabrics. The miniature vases are painted all over, except just above their bases,

¹ Myres and Ohnefalsch-Richter, *Cyprus Museum Catalogue* [C.M.C.] 1899. Nos. 225-27; Ohnefalsch-Richter, *Cyprus, the Bible, and Homer* [K.B.H.]. Pl. cxlix, 15e; cxlviii, 10.

² Myres. *Handbook of the Cesnola Collection of Antiquities from Cyprus* [Cesn.]. New York, 1914. Nos. 521-23 (painted white-ware); 899-902 (red-ware).

³ C.M.C.: *Cesn.* No. 201-2 (Middle Bronze Age); 473 (Early Iron Age).

⁴ British Museum, *Excavations in Cyprus* 1899: in the chapters on Enkomi and Curium.

⁵ C.M.C. Nos. 53, 173 (Early Bronze Age); p. 186, Tomb 98 (Late Bronze Age); p. 178, Tomb 25 (Early Iron Age 'Græco-Phœnician').

probably by carelessness. The bird, handle, and bull's horns have boldly painted bands; the annular body has a principal zone of various Late Minoan patterns, with similar motives discontinuously on its upper surface, between the vases; and also on the bull's head and neck. The concentric semi-circles, triangles and groups of bent lines are recognizable as degenerate Late Minoan flower-motives. The solid black centres of these circles and triangles, and of the bull's eyes, mark a last attempt at Minoan brush-worked silhouette; the pattern on the bull's forehead echoes the stately papyrus-flowers of the Cretan 'Palace Style' (Late Minoan II: 1500-1400 B.C.). This repertory is already well established in Aegean pottery from Tell-el-Amarna (about 1360 B.C.) and passes over on to the 'Philistine' fabrics of South Palestine (about 1200 B.C.) and the traditional Cretan repertory of Moulianá. Mr. J. D. Pendlebury informs me that on the Early Iron Age site at Karphi in the Lasithi District of Crete he has found a ring-vase with three bulls' heads; an interesting counterpart to our *kernos*.

The general impression given by these ornaments is that this vessel belongs to an early phase of the transition from the 'Late Minoan III' culture represented in the rich tombs at Enkomi and Curium, already mentioned, to the

earliest Iron Age of Kouklia and Katýdata-Linú.⁶

No precise date can be assigned to an isolated specimen without provenance or excavation-record; but the phase of culture to which this vessel belongs probably corresponds with the thirteenth or twelfth century B.C.

The essential resemblance is obvious between this annular type of *kernos* and the high-standing variety described by Xanthoudidis from modern Crete⁷, and by myself from Georgia⁸; and the ritual use of the Cretan examples has been confirmed for Georgia by Dr. R. P. Blake⁹.

This *kernos* has been already published by Dr. L. D. Caskey of the Boston Museum of Art, in the *American Journal of Archaeology*, XL (1936) 3, p. 313 (No. 10); fig. 10 (= Plate L, 1), and I owe to Dr. Caskey the permission to describe it more in detail, and to illustrate it with the Museum's photographs, Nos. C.7104-5. Its registration number is 35,735.

⁶ C.M.C., p. 4, 174.

⁷ *Annual of the British School of Archaeology at Athens*, XII, pp. 9-23.

⁸ MAN, 1937, 30, cf. 146-7. In the Hamburg Museum is another Georgian *Kernos* in the same blue green-on-white fabric, with a ram's head; and also a vertical ring-vase with neck, handle and spout, with flowers in relief, brown and red on yellow ground.

⁹ MAN, 1937, 147.

TONGAN COLOUR-VISION. By Ernest Beaglehole, Victoria University College, Wellington, N.Z.

170 The following material regarding the colour vision of the Polynesian Tongans was collected during the course of a recent field trip to Tonga. The data were collected by Pearl Beaglehole and myself from Tongans living in the village of Pangai, Vava'u, which was our headquarters while in the field, and from other Tongans from the out-patients' department of the Government Hospital, Neiafu, and from the Government Gaol, Neiafu. I have to thank Dr. J. C. Lopdell, Assistant Medical Officer, and Mr. John Feiloakitau, Chief Magistrate, both of Neiafu, for official assistance which helped us in the collection of the material.

The test used for colour-blindness was the Ishihara test (7th ed.), generally regarded as a reliable test for colour defects. We examined 135 Tongans, 67 males and 68 females. Five males proved to be red-green blind, a percentage of 7.46. No cases of female red-green blindness were detected. No cases of blue-yellow blindness nor of complete colour-blindness in either sex were discovered.

The percentage of red-green blindness in a random sample of Tongans may be compared with percentage figures for white male subjects which range between 7.2 and 12.8¹ (Clements, however, reporting that an average percentage of about 8 represents an accurate estimate of results of Ishihara testing of white males)²; for Chinese males, range 5.57 to 6.3 (Collins); for Turkish males, 5.3 (Collins); for American Indians, range 1.79 to 1.9 (Clements); for American Negroes, 3.7 (Clements); for the Todas, 8.54; and for Upper Egypt, 5.03.³ Some of these

¹ Collins, Mary: 'Tests in Common Use for the Diagnosis of Colour Defect,' *Rep., Brit. Ass. Adv. Science*, 1937, 207-208.

² Clements, F.: 'Racial Differences in Colour Blindness,' *Amer. J. Phys. Anthr.* 14, 1930, 428-430.

³ Rivers' results are summarized in Parsons, J. H.: *Colour Vision*, Cambridge, 1915, 145-151 and in Clements, l.c., Table 1, 425, Clements also presenting a summary, in the same table, of results of colour-blindness tests on primitive peoples prior to his date of publication (1930).

percentages may not be strictly comparable because of different tests used. Rivers, for example, relied largely on the Holmgren wool-matching test, which with white males, according to Clements, has given a diagnosed incidence of colour-defect about half that given by the Ishihara test. Clements' work on American Indians, American Negroes and some of the work on white males that he summarizes were all done with the Ishihara test. Comparing these three groups with Tongan males, it may be noticed that the percentage incidence of red-green blindness is: Whites, 8.03; Tongans, 7.46; American Negroes, 3.7; American Indians, 1.7. These figures, taken in conjunction with the weight of evidence derived from all available test results, definitely suggest a possible racial difference in the incidence in males of red-green colour-blindness.

Colour-blindness among white females has a definitely much smaller incidence than among males. A generally accepted figure is about 0.4 per cent. Failure to discover a case of Tongan female colour-blindness was therefore to be expected.

Of the five Tongan males with defective colour-vision, two were completely green-blind (Ishihara terminology based on responses to Plates 22 to 25 inclusive). The proportion of green-blindness to red-blindness among Whites, Negroes, and American Indians as reported by Clements (*l.c.* 429) is also in the approximate ratio of three to one.

One peculiarity was noted in the response of Tongan subjects to certain plates in the Ishihara test. According to Ishihara, Plates 18 to 21 inclusive can hardly be read by the majority of normal subjects. Ten Tongan males, however (14.92% of those tested), and 13 females (19.11% of females tested), though otherwise perfectly normal in their colour vision, showed not the slightest hesitation in reading the hidden numbers on these plates and were very puzzled when others, including ourselves, were unable to see what was to them clear and evident. I am unable to tell whether this Tongan facility is due to peculiarity in colour vision or to defects in the test itself. The hidden numbers become visible if the plates are looked at through a blue glass. Possibly the normal vision of some Tongans is more sensitive than that of Europeans to small differences in brightness. On the other hand,

it may be noted that Collins (*l.c.* 219-220) using the fourth edition of the Ishihara test in which Plates 10 and 11 appear to correspond to Plates 18 and 19 of the seventh edition, found that 4% of whites with normal colour-vision could read the hidden number in Plate 10 (18) and 27% could read the hidden number in Plate 11 (19). Collins regards the results for Plate 10 as distinctly curious and puzzling, but she believes that Plate 11 is proved to be an unsatisfactory test-plate. It may be noted that the 'deviant' normal Tongans all read all the four plates with equal ease.

In regard to general colour-discrimination, Tongan informants, male and female, were asked to name a series of colours in a colour chart. Specific colour names collected were: *hinehina*, cream or white; *tetea*, skin white; *fefefelo*, yellow or gold; *enga* or *engeenga*, yellow; *kula*, red; *uliuli*, black. There is no specific colour-name for blue and possibly none for green either. The Tongans use many descriptive colour-names. To give a few examples: *lanu moana*, blue (*lanu*, colour, *moana*, sea); *lanu mata*, green; *panefunefu*, brown (dim, obscure, indistinct); *memea*, tan or buff (drab); *kupesi*, dark brown (stencil for making bark cloth); *loufusi*, deep green (banana leaf). Degrees of saturation are expressed by such qualifying words as *mama*, light, and *fakapo'opouli*, dark.

In view of colour-test results, the lack of a specific colour-term for blue need not necessarily imply a poor discrimination for this colour, nor does the relatively poor Tongan colour-vocabulary necessarily connote weak colour-discrimination.⁴ All informants were at pains to indicate that they had no difficulty in distinguishing clearly each of the colours in the colour chart. Their difficulty, they said, was simply one of finding words to indicate clearly discriminated colours. Doubtless, as C. S. Myers has suggested,⁵ colour names are formed where they are needed; where they are needless, they will not be formed, however great the sensibility of a people to specific colours. The Tongans seem to have developed sufficient colour terms adequately to control their

⁴ For a summary of the philological evidence and the theory based thereon, see Klineberg, Otto: *Race Differences*, New York, 1935, 142-144, and Clements, *l.c.* 420-422.

⁵ Myers, C. S.: 'Some Observations on the Development of the Colour Sense,' *Brit. J. Psych.*, 2, 1908, 361.

environment according to specific cultural needs. Where named discrimination was superfluous to further this control, the name was not used.⁶ In terms of developing needs brought about by white

contact, *ad hoc* descriptive words or phrases seem efficient enough as far as the average Tongan villager is concerned to satisfy a necessity for increasingly exact colour-discrimination.

⁶ This explanation would also appear adequate to explain the peculiarities in the colour-naming system of the Pukapukans, another Polynesian people. See

Beaglehole, Ernest and Pearl: 'Ethnology of Pukapuka,' *Bishop Museum Bulletin*, 150, 1938, 356.

DEATH AND IMMORTALITY IN THE BELIEFS OF PRIMITIVE PEOPLES: NOTES TO THE INTERPRETATION¹ OF THE LATE K. T. PREUSS. By Dr. Walter Eisen, Leipzig.

171 Already in his degree-thesis (1894) the late K. T. Preuss was occupied with the subject of religious ethnology, which he never since relinquished. But Preuss laid much greater stress on empirical, geographical and economical conditions than in his later publications, when he was more and more attracted by mythology.

His presumption was that primitive peoples lack the faculty of uniting repeated experiences in a general formula. Because they do not consider death as necessary, unavoidable, established in the natural order, but are constantly impressed by its occurrence, myth becomes their principle of interpretation. But is it true that primitive peoples really lack that faculty? The active life of primitive peoples is certainly not devoid of causative thinking. Remember their astronomical, nautical, medical, agricultural knowledge; their hunting, their keeping of animals, their political organization, and the like, and you will find this statement of Preuss far too extreme. Is not myth also rather, with them, substantial realization of that very category of causality, from which no way of thinking may escape. I shall still have more to say about this.

Even Preuss himself does not deny the parallel connexion of these two series of thinking.² But by the *vis occulta* of the *Glaubenserlebnis*, which he believes to appear in this moment, he deprives himself of precisely that possibility of considering the mythic and the rational mode of conception as two mental activities not so very different, as two expressions of satisfying the same need—the need of causality. This need may make use of the means of rational thought, but it may also use imaginative fancy. Certainly, the so-called

'primitives' lack our rational conception of cause, of natural causation: they lack the idea that a specific cause is followed by a specific effect, e.g., that death is the consequence of a particular illness. In their mode of conception—namely that the death of a person is due to sorcery, or the failure of a technical action to a hostile power³—the cause is of mythic, 'super-natural' character. Yet a cause it is; their conception is no less causative for all that.⁴

But what is 'natural,' what is 'supernatural?'⁵ A thorough elucidation of these and similar notions would be of the greatest consequence. Furthermore, it would especially result that, for the so-called 'primitives,' the notion 'natural' contains far less distancing objectivity. They are in a much higher degree in unity with 'nature'; even, in a certain sense, with its 'inconceivable' phenomena. *Cum grano salis*. And one thing more: is the totality of primitive peoples one undifferentiated, homogeneous mass at all? The discussion over Lévy-Bruhl is not closed yet; but should it not have produced at least this result, that to consider 'primitive peoples' as a unity, strictly limited, over against 'civilized peoples,' is a cardinal error? Preuss's paper suffers likewise from this dogma, for he speaks only of 'the primitive peoples,' as if the religious ideas of a Pygmy, and those of a Maori, had an essentially identical structure.

Preuss is not able to explain 'myth' as such. Where, then, is its origin? For him it is 'somehow' taken for granted (p. 17). Probably his real problem is that of the origin of religion.

³ It is exactly the same with occidental medieval conception where the patient is a person into whom a demon has entered—whereupon the appropriate therapeutic treatment followed.

⁴ A. W. Nieuwenhuis lays great stress on this opinion, *Die Wurzeln des Animismus*, Suppl. Internat. Archiv f. Ethnographie, XXIV, 1917.

⁵ In many cases 'supernatural' ought to be replaced by 'extraordinary.' See Walter Hirschberg, *Völkerkunde* (Wien/Leipzig, 1936), pp. 66-67.

¹ Preuss, K. T., *Tod und Unsterblichkeit im Glauben der Naturvölker* (Sammlung gemeinverständlicher Vorträge Heft 146), Tübingen, 1930.

² Probably Preuss especially contemplated something of the kind (*Geistige Kultur* . . . (1914), p. 11), in speaking of groupings by attributes, in our sense, and so by magic attributes, i.e., such as admit magical action and effect.

Yet considered from the standpoint of the solution of *this* problem, he does not give any solution.

Perhaps—in spite of occasional contrary remarks—Preuss approached the subject of investigation, too much handicapped by our isolated conceptions of 'body,' 'soul,' 'existence,' etc. But it is just the non-existence of such conceptual analyses of living matter among the so-called 'primitives' that excludes the use of such conceptions. In their conception the limit between life and death is other than it is with us. A designation proposed by F. R. Lehmann⁶—'existential components'—might be extremely valuable: because more neutral, and harmonizing well with the theory of Animatism. Preuss more or less approaches this mode of designation (p. 17 *sqq.*). The conception of component-parts of 'existence' is joined by other similar conceptions; the component-part of existence, in the first degree, is followed by that in the second degree, and so forth. Thus Preuss turns against the theory of the dominance of the soul-conception in the religious ideas of 'primitives' about death and immortality; without, however, giving a detailed—so to speak, an ideal-typical—image of this theory in connexion with the corresponding conceptions about the religion of 'primitives' in general, i.e., without offering the decisive objection to this theory. With the phenomenon of death, identity is injured; a person is no more what he was before; either he is more or less. One (or several) component-part(s) of his existence is now to be supplemented. Deficiencies in the injured consciousness-of-identity are to be supplied. Identity is always re-established—and by means of another component-part of existence—and thereby the injured consciousness-of-identity is satisfied. That is the function of *myth*. Its substance is partly determined by the fact that, in many realms of thought, there is for the savage a (*quasi*-) unrestricted *possibility* of commutations; that is to say, his readiness to expect is (*quasi*-)⁷ unlimited. The images are not confined to empirically observed facts, and thereby the magical addition presents itself more easily;⁸

fancy plays its supplementing and modifying part. But 'we civilized people, too, with (or rather, in spite of) experiences which restrict and disillusion us, are at times inclined to regard ideas of future events (the realization of which, for our weal or woe, is essential) as true, because it is impossible for us to believe the contrary.'⁹ With *their* amount of knowledge, and of control over nature, the so-called 'primitives' answer the questions, imposed on them by the very lack of 'causality,' in a manner which formally corresponded exactly with ours.¹⁰ But it is essential to define very strictly the conditions for culture (as above)—namely, those for the standard of life—which certainly are of the greatest influence upon the thought of different peoples and even of different tribes. The standard of 'modern science' is never to be applied substantially to their interpretations of phenomena,¹¹ since naturally the result would be, to judge the interpretations of the 'primitives' either as absurd superstition, or as products of mythic thinking of an entirely different sort. "The processes of thought, in so-called 'mythical thinking' are 'themselves exactly the same as in most of the 'higher cultures.'"¹² Any other way of considering them is wrong. But in 'primitive' thinking, more phenomena are unanalysed than in our thinking; the 'primitive' therefore does not work with univocal, univocally-attributed conceptions and abstract qualities, but with *complexes* of phenomena, with conceptions far richer in meanings and relations than ours—e.g., processes, actions,

⁹ Heinz Werner, *Ursprünge der Metaphor*, Leipzig, 1919, p. 53. Cf. also Thurnwald in his review of Lévy-Bruhl, *Deutsche Literaturzeitg.*, 1928, No. 10. In addition, cf. Preuss, *T.u.U.*, p. 6: "In place of experience, therefore, easily arises among 'primitives' an unshakable belief, the product of desire . . ."

¹⁰ Dr. Kohler, a medical missionary writes, of a sick Zulu, that "his need of an explanation (*Causalitätsbedürfnis*) is many times greater than his wish to get well. His causal thinking is formally the same as ours; but in practice hard for the European to understand and hard to approach. A natural concatenation [as we understand it.—W. E.] of events in accordance with natural laws does not exist for him." This has led, in the literature of the subject, to denying him 'casual thinking' and speaking of 'magical participation.' *Anthropos.*, 1931, xxvi, p. 585-593.

¹¹ In fact, Preuss' fundamental thesis is produced by such an erroneous application, although Preuss certainly does not intend it.

¹² Thurnwald, *Z. f. Völkerpsychologie u. Sociologie*, 4 (1928), p. 88.

⁶ In conversation, cf. *Deutsche Literaturzeitung*, 1933, No. 43, col. 2056.

⁷ Here a new problem arises, of course, a fundamental problem.

⁸ Preuss, *Geistige Cultur*, p. 9. F. R. Lehmann, *Tabusitten*, p. 240.

words, sounds, colours, forms, numbers.¹³ Magical thinking and magical acting are founded on that fact, and on a notion of symbols and their effective power, which is much nearer to reality. This thinking establishes, especially by imagination, correlations between the component-parts of existence, which the 'primitive' deems substantially connected by these very relations—substantial relations which are in highest degree 'real' for him, because effective. We, on the other hand, have become accustomed to see there only external relations. One might say by a paragram: 'primitive thought is no less logical than our thought; it is only more analogical.' It works much more with images, often considered as symbols, more or less altered reproductions of external and so-called internal perceptions. There

is no differentiation between symbol and thing symbolized. What a peculiar and interesting relation—and there are more of these—to the newest positivism and nominalism!

In spite of all this, we appreciate the merit of Preuss's advance towards theory. The criticism offered here has its origin in the conviction that Preuss's unpretentious booklet raises most important theoretical problems of anthropology, and especially of ethnopsychology. In Preuss, one of the leading theoretical ethnologists in Germany, has disappeared. He was the theorist, at a time when 'research' meant hardly anything but the description of museum collections. Here one side of his interests has been illustrated; but it was a matter especially dear to him.¹⁴

¹³ Thurnwald expresses himself in this sense on several occasions, e.g., in his report 'Prälogik?' in *Z. f. Völkerps. u. Sociol.*, 4 (1928), pp. 324 sqq.

¹⁴ For the latest views of Preuss see the *Lehrbuch der Völkerkunde*, 1937, reviewed below (MAN, 1939, 178), and especially his chapter on 'Religion.'—Ed.

NOTE ON THE CH'WAN MIAO OF WEST CHINA. By David Crockett Graham, Local Correspondent for West China.

172 In MAN, 1938, 66, the article on 'Blood Groups of the Aboriginal Ch'wan Miao of Szechwan Province, West China,' by Stephen C. H. Yang, Y. T. Beh, M.D., and Professor W. R. Morse, M.D., West China University College of Medicine and Dentistry, Chengtu, is the following paragraph:—

"There are several Miao tribes. The Ch'wan Miao probably number about 100,000, and their place of residence is in Southern Szechwan and Northern Kweichow. They are under the political control of the Chinese. All of the Miao tribes are presumably the modern remnants of the San Miao whose original habitat, roughly speaking, was in the lower Yangtse River Basin, being approximately the territory surrounding the Tung Ting Lake. They have been in their present location 2,000 or more years. A part of the San Miao were expelled to N.W. Kansuh, according to ancient Chinese records; this, if true, means a probable or possible ancient racial mixture with the Chiang, Noso, Liao and other tribes."¹

In view of the fact that this statement seems incomplete and incorrect in some details the following notes are offered.

First, the present habitat of the Ch'wan² Miao

is Northern Kweichow, Northern Yunnan, and Southern Szechwan. There are probably more Ch'wan Miao in Northern Yunnan than there are in Kweichow or in Szechwan.

Second, the statement that the Ch'wan Miao have lived in this region more than 2,000 years is contradicted by both Ch'wan Miao tradition and all references in Chinese histories that are known to the writer. The Ch'wan Miao legends state that their ancestors lived not in Kansuh, but in Kuangtung, from which, after being defeated by the Chinese, they were brought by a forced migration, with their hands tied behind their backs, to their present abode. The legends are not perfectly clear as to the date, but indicate that it was in the Ming or early in the Manchu dynasty. One legend states that Wang Wu Chai 王武寨 near Lo Piao 洛表 was first occupied by the Ch'wan Miao during the Ming dynasty.

In the History of the Suifu Prefecture 敘州府志 are the following references to the Miao, which agree closely with those found in the history of Kung Hsien 珙縣志.³

¹ The word Ch'wan 川 means river. The Wade and Giles romanization is Ch'uan. The writer uses the first romanization because it is the one used in the article that is being discussed.

² These references have been found by Mr. Lin Ming Chun 林名均, assistant curator of the West China Union University Museum of Archaeology, who has also assisted in the translation.

¹ MAN, 1938, 66.

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In the Sung dynasty there was a man of Han Ch'uen in Kung Hsien named Liu Kuang Hsi 柳光熙, who was then District Deputy of the South-west I. Near the beginning of Ch'ien Teh 乾德 (963-967) he led some local soldiers and fought the I Miao⁴ of five Tou and five T'uan.⁵ He very bravely destroyed the enemy, and the ten Chou 州, the five Wei 衛, and the twenty-nine Hsien 縣, all feared and were subordinate to him.

Vol. 39.

In the Sung dynasty in the time of Ch'ien Te (A.D. 963-967) Liu Kuang Hsi was the District Deputy of the South-west I 夷. He commanded sternly and used both kindness and strictness. The I of the ten Chou, the five T'an and the twenty-nine Hsien all admired and were subordinate to him.

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In the sixteenth year of Ch'eng Hua 成化 (A.D. 1480) the white Lolo and the I Tzu 孖子 fought against the Man of Ta Pa of Tu Chang 都掌大壩蠻. Chou Hung Mu 周洪謨, Vice-president of the Board of Rites, reported to the Emperor, "I am a Suifu man and know the conditions of the Suifu aborigines. . . . The White Lolo are reported to be the roving abori-

⁴ This does not indicate clearly whether there were both I and Miao, or the I were also called Miao, or there were Miao who are also called I or I Miao.

⁵ The Tou and the T'uan are small divisions of territory.

ROCK-PICTURES AND PREHISTORIC TIMES IN DUTCH NEW GUINEA. By J. Röder, *Forschungsinstitut für Kulturmorphologie, Frankfurt am Main. Illustrated.*

173 W. Merish Strong was the first who (in MAN, 1923, 119) published rock-paintings from New Guinea and especially from the Central District of Papua (British New Guinea). The pictures in question were exclusively paintings in red, as the subjects of which W. Merish Strong mentions hands, crescents, stars, tortoises, figures of man and cassowary. Since that time no further discoveries have been made.

As a member of the Frobenius Expedition, which visited the Moluccas and Dutch New Guinea in 1932, I had the chance of studying a further large area of New Guinea, situated on the southern shore of the MacCluer Gulf between Kokas and Goras (v. map). Here the coast of the Onin Peninsula is divided into a great number of small

gies of Kuangsi, of which there are several thousands without any ruler. In the reign of Ching T'ai 景泰 (A.D. 1450-1457) they united with the Miao of Yung 戎 (Hsin Wen) and Kung 珙 (Kunghsien) and conquered nine Hsien including Ch'angning."

In the ninth year of Cheng Te 正德 (A.D. 1514) an I of Ko K'uei 葛魁 named P'u Fa O 普法惡 committed fornication with the I woman Mi Lang 米浪 and a son was born. They falsely called her Wang Mu 王母, the son Maitreya 彌勒佛, and O the God of Heaven 天官. They secretly made charms, seals, flags, and swords, and assembled together the P'O, the I, the Miao, the Lolo, and such aborigines to burn incense. To each they gave a printed charm and made him carry this, saying that weapons could not injure him.

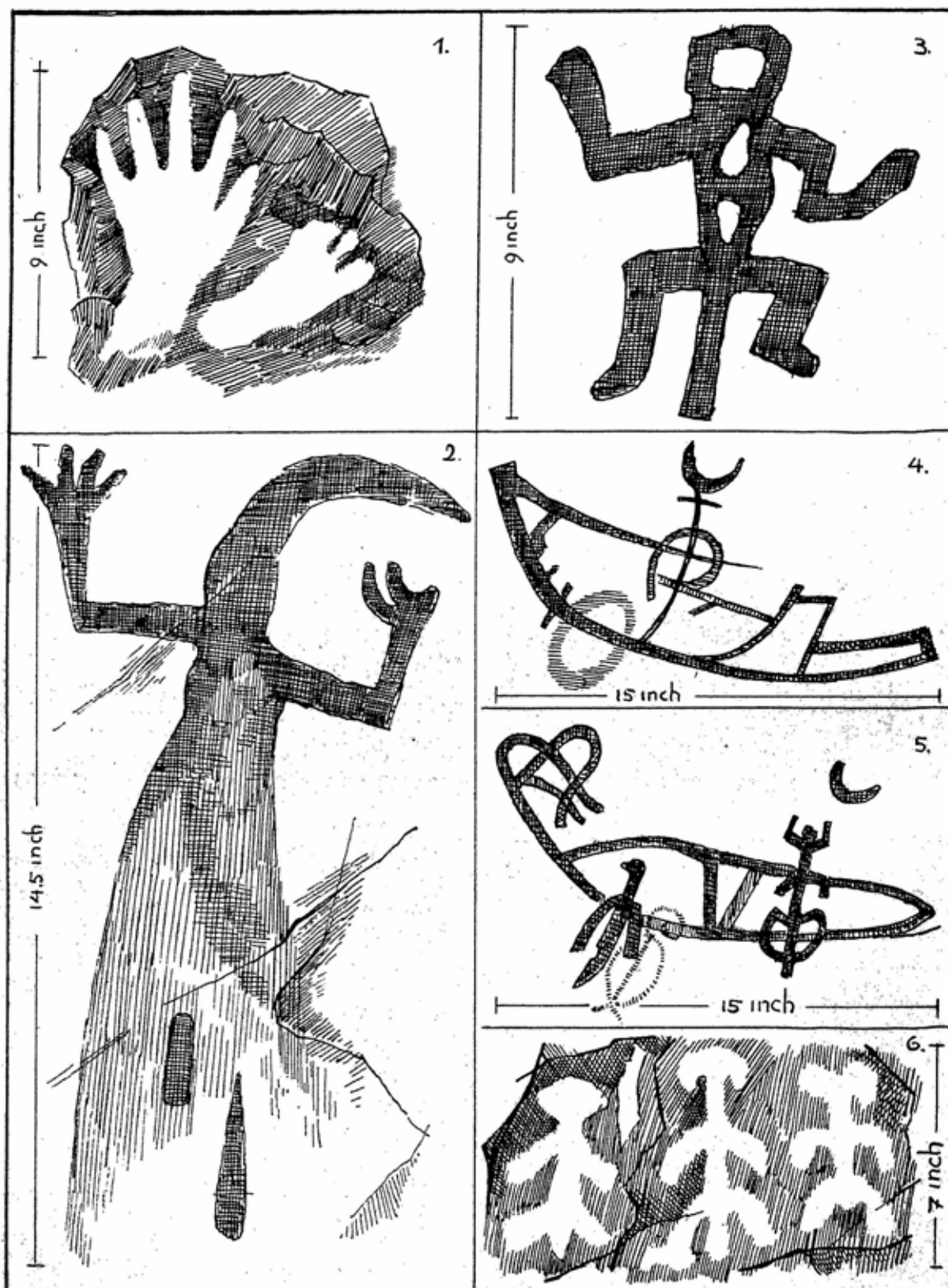
Evidence has not yet been found that the Miao were in this location before the Sung dynasty. In the first reference quoted above the word Miao is used, but the meaning is uncertain. It is possible that a historian in later times, because there were Miao in this region after the Sung dynasty, assumed that there were at the time of Liu Kuang Hsi and therefore added the word Miao. The Miao were in this locality during at least part of the Sung dynasty, but that the Ch'uan Miao have been there over two thousand years, that they are descended from the San Miao, and that they have had contacts and racial mixture with the Chiang are matters of which there is at present no historical evidence.

and minute islands, whereas in other parts of the peninsula the coast is continuous. The two great islands Ogar and Arguni lie like a breakwater in front of this huddled mass of islands, forming a landscape of fairyland beauty.

Headquarters for the study of the whole area was the village of Arguni on the island of the same name, situated in the middle of the area where the rock pictures are to be found and itself yielding a rich harvest of them.

The painter of the expedition, Mr. A. Hahn, has either copied all the most important places of our finds or has traced the paintings naturalistically and thus has gathered an extensive collection.

The paintings have always been executed in grooves and hollows of cliffs, which formerly have



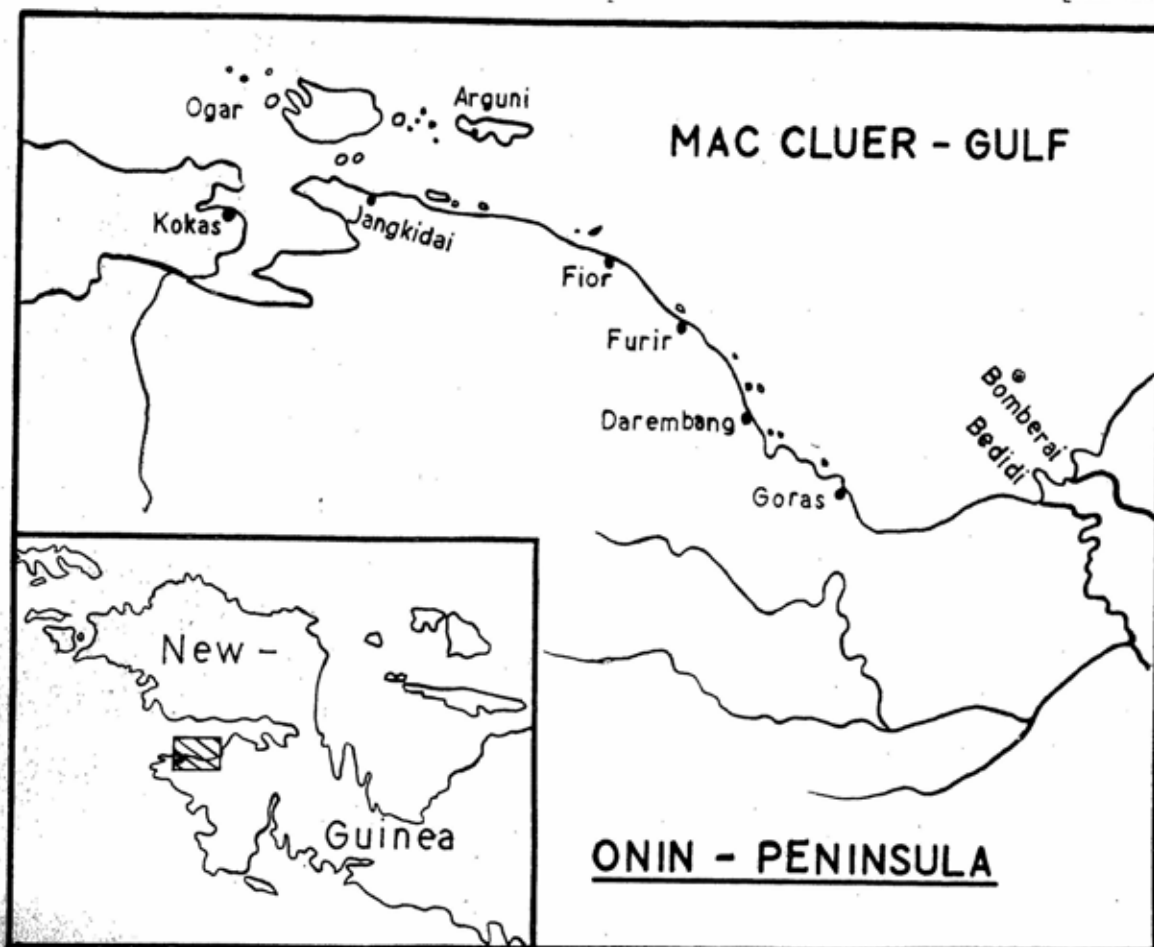


FIG. 7.—SKETCH MAP OF THE ONIN PENINSULA AND MAC CLUER GULF, DUTCH NEW GUINEA.

The shaded portion of the inset map represents the position of the district.

been washed out by the surf of the ocean. Those grooves in the shape of galleries follow the coastline of many of the islands, two to four metres above high-water mark of to-day, and give a hint of quite different geological conditions of the whole area in former times. Probably the land was once raised rather quickly to its present height and then the islands have again been eroded from below. As paintings are found also in parts of the lower grooves, it is to be presumed that all those drawings have been executed after the stabilization of the present geological conditions. The pictures are always painted, never engraved.

Apart from quite recent drawings, done by children, and representing Chinese boats, steamers, and so on, three principal layers are to be

distinguished. For the paintings of the most ancient layer, red paint is used exclusively. Four different groups of style can be discerned, in this layer. Despite all differences in style there exists a far-reaching uniformity of subjects.

The characteristic signs of the eldest style, in the layer of paintings in red, are silhouettes of hands which here and there are to be found by the dozen on the same wall; silhouettes of right hands, left hands, children's hands, rarely hands with mutilated fingers and also silhouettes of arms and feet. These silhouettes were made by individuals, pressing hand or foot against the rock and sprinkling paint on the rock until the part covered by hand or foot, detached itself as a white spot from the surrounding red (fig. 1).

According to the myth of the aborigines, their

ancestors came from the east, or together with the sun. But they were still blind; they had to grope their way alongside the rocks and thus originated the prints of hands and feet. These mark the track of their ancestors' wandering.

In the other styles of the red-paint layer, silhouettes of hands are not found any more, but the other subjects of the paintings are approximately the same; figures of fish (all of species still living there), trepang, crocodiles, lizards, and many figures of man. Sometimes it is absolutely impossible to decide whether a drawing is meant to represent a man or an animal. The boundaries of the two spheres are melting into one another. From this we have a glimpse of the religious conceptions of the rock-picture people. But some series of figures of man, represented rather often aside from the big find-spots, lend themselves still more easily to this purpose. Mostly these figures are represented covered by a large headdress in shape of a pointed night-cap; the hands are raised in adoration (fig. 2). By the people living nowadays these drawings are regarded as representing their ancestors. In those figures the sex is very often drastically characterized (fig. 3). Sometimes the human figure, whether male or female, is abbreviated till there only remains the sign of sex, in some instances even in copulation. There is no doubt that a fertility-cult is involved, the more so as the aborigines, who for centuries have adopted Mohammedan faith, still nowadays put up in rock niches figures, cut in wood, of the kind described, and offer there rags, shells, and fish bones to get good catches.

The subjects of the paintings in black point to a people of a culture quite different from that of former periods. The principal role in the world of this people is now played by their boats (figs. 4, 5) which have not been represented in the previous layers. Certainly the boat played a prominent part in the life of ancient times, and now it begins to take up its part in cult. This art began with broad lines in a severe style, but it soon degenerated into a play with fibred lines, the meaning of which is mostly uncertain.

Signs painted in white are often put on the ancient underlying paintings in red, and give the impression that it was intended by the new drawings to put a comment on the old. Also the myth is shown of the ancestors' wandering, groping alongside the rocks (fig. 6).

In most cases the paintings are done on the

walls of the washed-out grooves. But there are also found some caves, with pictures, belonging both to the epoch of rock-paintings in red, and to that of paintings in black. In one of the caves on the island of Arguni, where rock-paintings had been discovered, the author did some digging and found three layers. The layer on top contained only good pottery, in parts decorated in relief; the second, simple undecorated earthenware and artifacts of flint; and the lowest only flint artifacts, but no ceramic.

On one of the stalactite pillars of the cave a figure was painted, with hands raised in adoration. Below this figure, in the second layer, was found a big round stone with slight traces of red paint on its surface, as used in the rock-pictures. The stone itself is presumably to be regarded as a stone for offerings and the picture on the stalactite as the personification of some deity or ancestor.

In one of the caves of the island of Ogar the inhabitants still nowadays deposit offerings on a round stone for the 'master of the fishes', living in a stalactite, to secure good luck in their fishing. But all this is nothing but a last faint survival from ancient times, among a population of quite another history and another culture.

This population consists mostly of people who, centuries ago, came from other parts of the Archipelago, from the Gorom islands, Ceram, or Ternate, and who settled here, not without warlike complications with the indigenous inhabitants; witnesses whereof are the old fortified places of refuge, now deserted everywhere. In the language spoken on the island of Arguni these places are called *otem*. In former times whole islands have mostly been fortified to serve as refuges.

In the same semi-caves, which contain the rock-paintings, burials of the ancient inhabitants are found; coffins in the shape of ladders, on which the dead body was lying, the limbs contracted, and wrapped up in matting. The whole is meant to represent a boat, in which the deceased is going to the hereafter. Sepulchral gifts—china-ware, pots, household goods and tools for building boats—are often found and afford a good insight into the material culture of the ancient times.

To-day all these rites and customs have given way to Islam, imported from the Moluccas by later immigrants, and to-day accepted in this area by the whole of the coast population.

PROCEEDINGS OF SOCIETIES.

XXVIIIth International Congress of Americanists:
174 Mexico, 5-14 August, and Lima, 10-15 September, 1939.

The First Session of this Congress was held in Mexico City, on August 5th-14th, under the patronage of General Cardenas, President of the Republic, and under the presidency of Dr. Alfonso Caso, Director of the National Institute of Anthropology and History.

The organization of the Congress was in the hands of this body, which has under its charge all the ancient and historical monuments of the country. The session was attended by 396 full and associate members from 31 different countries, including a large contingent from the United States, and European representatives from Great Britain, France, Germany, Sweden and Norway.

The formal opening of the Congress took place in the fine Sala de Espectáculos of the Palacio de Bellas Artes, which also provided excellent and convenient accommodation for the sectional and general meetings. After addresses by Dr. Caso and by Dr. A. A. Machado, Minister of Public Education of Costa Rica, speaking in the name of the Congressists, and a programme of classical, Spanish and Mexican music brilliantly performed by the Symphony Orchestra of Mexico under its conductor, Carlos Chavez, the Congress was formally declared open by the Secretary of Public Education in the name of General Cardenas.

Sectional meetings were held throughout the following week, and 125 papers submitted in 9 sections. Among the more important archaeological papers may be mentioned the account by Dr. Caso and his assistants of their epoch-making excavations at Monte Alban, Oaxaca, which were also illustrated by a special exhibition of the finds. Many other recent excavations were described, and the problems of the Maya calendar fully discussed.

Receptions were offered by the Department of Foreign Affairs, the Department of Public Education, at which we were entertained with a programme of Mexican and Indian songs and dances, and by the National University and Mexican Scientific Societies with music performed by the University orchestra. Day excursions by motor-coach were made to the archaeological sites of Teotihuacan, Tenayuca, the Pedregal, and Cuicuilco, as well as to the early Spanish monasteries and churches of Acolman, Tepotzotlan and Churubusco; and finally the members embarked on a delightful aquatic trip, which traversed the water gardens of Xochimilco and concluded with a 'country banquet' given by the Central Department.

The wonderfully rich collections in the Museo Nacional were also visited under the guidance of Dr. Caso.

The concluding general session was held on Monday, August 14th, when the sections presented their reports and a large number of resolutions was adopted. Invitations for the XXVIIIth Session in 1941 were received from France and Chile, and the former was accepted by a majority vote.

From August 15th-19th a major excursion was arranged to Puebla and Oaxaca, in which 220 members took part. A total distance of some 600 miles was covered, by motor coach as far as Tehuacan and by special train from there to Oaxaca. The great pyramid of Cholula, the interior construction of which with its five principal superpositions has been accurately determined by means of a series of tunnels, was visited en route; in fact some of the party were almost lost in the subterranean labyrinth when the lights went out. Members were received and entertained by the governors and mayors of the cities of Puebla and Oaxaca. At the latter city our arrival at 10-30 p.m. was signalized by festive music from the civil and military bands and a display of fireworks, and we were presented with badges making us 'Huespedes de Honor' of the city during our stay. One morning was devoted to the remarkable site of Monte Alban, where we were permitted to inspect some of the chamber tombs, and to observe the work of preservation and restoration in progress. Another morning was given to Mitla. Both of these visits were conducted by Dr. Caso, who also guided us round the Oaxaca Museum and explained the magnificent treasure from Tomb 7 at Monte Alban, which now occupies a whole room in the Museum, and is very well displayed.

The opinion was freely expressed that this was one of the most successful meetings of the Congress of Americanists ever held. Certainly nothing could have exceeded the interest of the programme or the unflinching kindness and hospitality of our genial hosts. It is worth recording that all the excursions, including travel, bed, and board on the 5-day tour, were provided free of any expense to all members wishing to take part in them.

The President and the organizing Committee are to be heartily congratulated on the striking success of the Congress. The publication of a full *Compte Rendu* is promised for next year.

The Second Session of the Congress was held in Lima, Peru, on September 10th-15th. The writer was unfortunately prevented by political events from accepting an invitation to attend, and is therefore unable to report on it. H. J. BRAUNHOLTZ.

OBITUARY.

Robert William Reid, M.D., LL.D. Aberd., F.R.C.S.:
175 1851-1939.

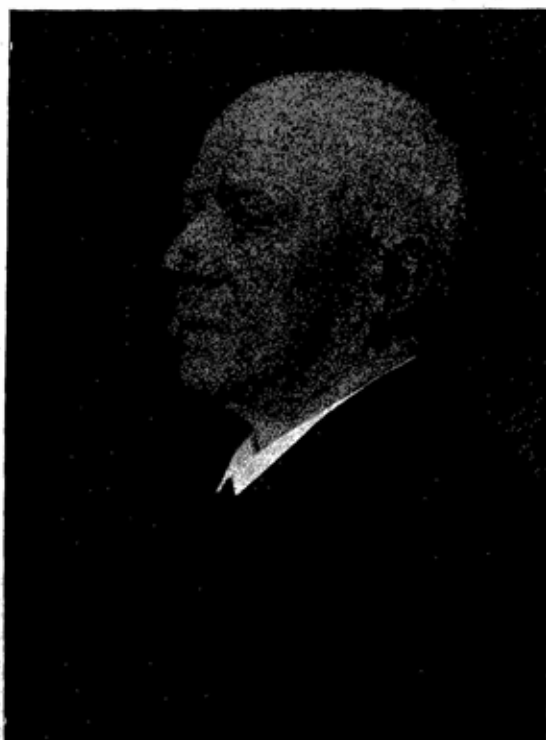
Professor R.W. Reid, emeritus regius professor of anatomy in the University of Aberdeen, died at Aberdeen on 28 July, 1939, in his 89th year.

He was born in the manse of Auchindoir, Aberdeenshire, in 1851, being the third son of the Reverend William Reid, minister of the parish. He studied at Aberdeen University, graduating M.B., C.M., in 1872, and M.D. three years later; in

1881 he became a Fellow of the Royal College of Surgeons of England. He began his career as an anatomist in his Alma Mater by acting as assistant for one year to the late Professor Sir John Struthers. Thereafter, at the early age of 22, he was appointed demonstrator of anatomy in the Medical School of St. Thomas's Hospital, London, becoming lecturer in anatomy in 1877. One of the first whole-time anatomists in the London Medical Schools, he not only reorganized the anatomy department at St. Thomas's but found time for research, and in *The Lancet* of 27 September, 1884, published 'Observations on the Relation of the Principal Fissures and Convolutions of the Cerebrum to the Outer Surface of the Scalp'—a paper in which is described what is known as 'Reid's base line,' a precursor of the Frankfurt plane. In 1887 when the Anatomical Society of Great Britain and Ireland was founded he became one of its original members, was elected to its first Council and later he filled with distinction the office of president. In 1889 Reid was appointed to the regius chair of anatomy in Aberdeen University. With his characteristic energy he planned and obtained new rooms for research and greatly developed the museum. Under his care the teaching and equipment of the department were greatly extended and a lectureship in embryology created.

As a Fellow of the Royal Anthropological Institute he was particularly interested in anthropology and in 1896 he instituted an anthropometric laboratory where the physical characteristics of students were and continue to be recorded. Three important papers based on the data from these records were published in collaboration with J. H. Mulligan, M.B., in the *Journal of the Royal Anthropological Institute* for 1923 and 1924. An interesting activity in connexion with anthropological study in the University was the formation of the 'Aberdeen University Anatomical and Anthropological Society.' This society, conceived and started by students in 1899, has continued to flourish to the present day. One of Reid's most outstanding achievements was the initiation in 1907 of the University Anthropological Museum. He acted as honorary curator of this Museum from its inception until 1938 and in its development gave abundant evidence of his pertinacity and capacity for sustained exertion. The University possessed several valuable archaeological and ethnological collections, and these Reid brought together and rearranged. Thus was formed a nucleus from which has developed a great Museum by the addition of specimens gifted by many former students and friends of the University. Perhaps the greatest benefactor to the museum was the late Sir William Macgregor, a medical graduate of the university, a successful colonial administrator, and

an anthropologist in the widest sense of the term. To him the anthropological museum owes its magnificent collections of specimens from Fiji, New Guinea, Lagos and Newfoundland. In 1912 Professor Reid prepared a catalogue of the Macgregor Collection and in the same year completed and published



ROBERT WILLIAM REID: 1851-1939.

an 'Illustrated Catalogue of the Anthropological Museum, Marischal College.' In 1928 he published, in *Biometrika*, in collaboration with Dr. G. M. Morant, 'A Study of the Scottish Short Cist Crania.'

In appreciation of his outstanding work in the development of Anthropology in the University of Aberdeen the Reid Lectureship in Anthropology has been instituted.

During his thirty-six years as professor of anatomy and for thirteen years as emeritus professor, in the fulfilment of the duties of his chair, as dean of the Faculty of Medicine, as Member of the University Court and representative of the University on the General Medical Council, Professor Reid rendered loyal and conspicuous service to his University.

ALEX. LOW.

REVIEWS:

PHYSICAL ANTHROPOLOGY.

An Introduction to Modern Genetics. By C. H. Waddington. London, Allen and Unwin, 1939. 441 pp., 160 figs. Price 18s.

176 While modern genetics has fundamentally affected the bases of all the biological sciences, its rapid

growth into an enormous body of literature created the danger that other biologists might regard it as a stranger whose acquaintance they need not cultivate. There is therefore a need for a series of books which will integrate plant and animal genetics with the better known fields

of general botany and zoology, as well as with the more special sciences of embryology, biochemistry, cytology, systematics and ecology. All this is probably beyond the powers of one individual; but Dr. Waddington, an embryologist, has made an excellent beginning in writing a work which deals with the more recent facts of genetics in such a way as to relate them to embryology and emphasize their physiological and evolutionary background.

The book is divided into five parts dealing respectively with formal genetics, genetics and development, evolution, genetics and human affairs, and the nature of the gene. Each part is in several chapters. In section four the methods of human genetics are discussed and the chapter on the genetic structure of human populations deals with such topics as the genetic differences between races, national and racial intelligence quotients, genetic differences between classes, and the control of the genetic composition of the human population.

Anyone wishing to gain better acquaintance with the points of view arising from genetic science and its impacts on other fields of biology will find this book full of interesting material.

In his use of the term mutation the author has, unfortunately, tended to follow the American school of zoologists in restricting its use to gene mutations only. This is unjustifiable either historically (because De Vries originally gave the term the widest connotation) or in relation to the phenomena of evolution, since many changes, for instance, in chromosome number, are of great evolutionary importance. Such changes, indeed, stand for more in phylogeny than many gene mutations.

The cytological side, although in some points well done, suffers from the fact that as the author is not a cytologist, he has relied upon the advice of a school of cytologists whose tender regard for their theories is apt to outrun their respect for the facts of observation. Certain adventures into the field of botany are also less happy. For example, as regards apomixis and related phenomena of reproduction, terms which were well known and clearly understood a generation ago are attributed to a

young biologist whose sole contribution to the subject consists in writing about them.

The author is particularly at home in dealing with the genetic problems connected with development. This section of the work constitutes a valuable contribution to the borderland of embryology and genetics. The book, as a whole, will serve a useful purpose in introducing the reader to the many ramifications of modern genetics.

R. R. G.

Travaux de l'Institut Anatomique de l'Ecole Supérieure de Médecine de l'Indochine (Sect. Anthropol.). *Tomes II* (1937) et *III* (1938). *Tome IV. Les Caractéristiques Anthropologiques des Indochinois*, par P. Huard et A. Bigot (1938). Hanot, Imprimerie d'Extrême-Orient.

The second and third volumes of this new series of publications contain a number of researches dealing with different physical characters of the natives of French Indo-China. The first volume (1933-6) has not been seen by the reviewer, but the list of its contents given in Vol. 3 shows that it is of the same nature. The majority of the short papers may perhaps be considered of anatomical rather than anthropological interest, but the data in them are presented in such a way that comparison with those for other races is facilitated, and such comparisons are made to a considerable extent. It may be noted that nearly every paper in the first three volumes is written entirely, or as part-author, either by M. Huard, or by M. Bigot. These industrious research-workers collaborated in the fourth volume, which provides a remarkably comprehensive survey of the physical anthropology of the country treated. The authors are to be congratulated on this achievement, which is obviously of very considerable anthropological and medical importance. One may hope that they will supplement it later by a study of people of mixed French and Annamese descent. The statures and weights of Eurasian boys at Tonkin are given, but otherwise it is said of the group that "les précisions anthropologiques" "font absolument défaut."

G. M. MORANT.

ETHNOLOGY.

Lehrbuch der Völkerkunde. *Unter Mitwirkung von Fachgenossen herausgegeben von Konrad Theodor Preuss.* Stuttgart 1937: viii+446 pp. With illustrations and map. Price RM. 25 paper, 27 cloth.

This is as authoritative a pronouncement of German ethnological theory and method as we are likely to see. It was at no time an easy book to estimate—hence the delay in reviewing it—least of all now, when the editor and principal contributor Dr. Konrad Theodor Preuss, is dead, and other contributors have illustrated their points of view in other writings. It was a great undertaking, when ethnology and kindred studies have gone so far into varied specialization, to formulate their common hypothesis and philosophy, even after excluding the 'independent sciences of race-study and prehistory,' which are nevertheless not 'independent' but indispensable collaborators.

The eight eminent specialists, under the careful guidance of Dr. Preuss, have done their departmental work well, reviewing the progress of each branch of ethnological knowledge, indicating what they regard as its immediate prospects and tasks, and offering useful advice to intending workers. For the book is designed as a handbook for students, as well as a survey of the subject for the public.

Two sections, by the editor and Dr. Mühlmann, deserve special comment, since they go beyond these

primary requirements, and supply a general outlook which is significant. Mühlmann's introductory chapter on *Methods and Aims* discusses the position of ethnology (defined, p. 8, as synonymous with *Völkerkunde*) between history and biology, geography and sociology, prehistory and oriental studies, psychology and the specific study of race. The retrospect of ethnological studies emphasizes their initial dependence on an evolutionary biology and sociology, on Darwin, Spencer, and Comte; but rightly stresses also Bastian's combination of psychological (*Elementargedanken*) and geographical (*Völkergedanken*) conceptions, which influenced German workers profoundly, and Ratzel's complementary view that ethnology has its beginning and its end in history. To the current 'clash of cultures' Mühlmann ascribes the 'functional' movement which treats ethnological work as a scheme of large-scale experiments, on whole cultures and on component traits, and so restates the biological outlook alongside the historical. Here, with Malinowski and Radcliffe Brown, stands Thurnwald who is responsible for the sociological and economic chapters here. Ethnology thus emerges (p. 8) as the study of the struggles of men and of peoples to make themselves at home in their regional habitat, and in the lapse of time. Though generalization may properly be attempted, as in biological science, there remains an historical element, contingent and unpredictable, which is not wholly absent even from physical science,

and explains the peculiar role of experiment and of statistical method in ethnology. For an ethnological occasion can never precisely occur, and moreover, the human subjects of ethnological study react on the 'scientific' observer, who is (after all) himself human too. The lack of documents, and comparative rarity of monuments, which distinguish ethnology from history have caused stress to be laid on those separate 'elements' of a culture, for which there is evidence; but with larger experience cultures may be contemplated as coherent and organic wholes, undergoing co-ordinate changes in time, but at different speeds, always trying to adapt themselves to environment, and creating historical occasions out of cultural processes. What needs to be explained is not 'diffusion' and 'progress' only, but *stagnation*: it is the rate of change that matters, and here both documentary, archaeological, and especially traditional data are significant.

Thus, for Mühlmann, a culture is a system of ethnic selection, and its outcome is a race, which like its co-ordinate culture is in continual change. Ethnology and physical anthropology consequently return into closer relation than aforesaid, and the task of ethnology in a world of culture-clashes is accordingly twofold:—(1) to study other peoples as elements in the observer's environment, (2) the interaction of other peoples with each other, as evidence of the character of each, (3) to illustrate a people's own capacity for self-determination, in its actual habitat; a task which, for Mühlmann, need not and should not claim priority over the other two.

On similar lines Thurnwald deals with the mental constitution of native peoples, believing the central problem of ethnology to be the psychological; whereas obstacles of all sorts repress men's spontaneous use of their reason. There are occasions when habitual freedom to think leads to notable intellectual advances, with wide social and technical effects, and enhancement of those intellectual activities themselves. (p. 55.)

For *Religion*, Preuss has contributed a masterly retrospect of the principal theories, and an examination of the reasons why 'civilized' observers find 'primitive' religions so hard to understand: the most significant being that they have (or have had) a religion of their

own, to which widespread notions such as polytheism and chance are alien. 'Primitive' religion is primarily concerned to enhance man's conviction of power, in society as in nature. It is not concerned with goodness but with ability. The ethnological relation of such 'primitive' beliefs and practices, to the state-religions of the older civilizations, to the great founder-cults, and to the notion of divine sanction to altruistic self-devotion, is traced in an epilogue (pp. 119-20) remarkable both for the time and the place of its publication.

The same line of thought inspires the chapter on *Poetry*, illustrated by Preuss from folk tale, drama, and song. Those on *Music*, by Marius Schneider, *Representative Art*, by E. von Sydow, *Language*, by Gerhard Deeters, and *Technology*, by H. Nevermann are more strictly technical. Thurnwald's chapters on *Society* and *Economics* follow the general lines of his five-volume book on *Human Society*, to which cross-references are given. Besides an outline of *Ethnological Jurisprudence* ('*Rechtsforschung*') Leonhard Adam gives a valuable retrospect of theories and methods. He distinguishes 'analytical jurisprudence' from the sociological and psychological study of native laws, and of conflicts between systems based on tribal structure and European legislative codes; and emphasizes the practical utility of the latter study.

On the 'Future of Native Peoples,' D. Wertermann discusses decline of populations, collapse of cultures, race-mixture, and the methods of Europeanization; and concludes that natives in general are able (and willing) to adopt the principle as well as the externals of 'western' culture: distinguishing however between peoples who retain a stable way of life of their own (as in Uganda) and those who have lost or are losing it, and expressing some doubt whether either category is likely to make any positive contribution to their new mode of life.

The appendices of Preuss and Adam on field-methods contain many valuable suggestions, and the latter thinks highly of our own *Notes and Queries in Anthropology*. The lists of journals and museums have more errors and omissions than might be expected and the sectional bibliographies vary greatly in scale; but the indices are adequate. J. L. M.

CORRESPONDENCE.

Dr. Bernatzik replies to Major Seidenfaden. (Cf. MAN, 1939, 64.)

179 SIR,—In MAN, 1939, 64, Major Seidenfaden (Bangkok), discusses a short article written by me regarding the preliminary results of my expedition to Further India in 1936/37, published in *Forschungen und Fortschritte*, No. 10 (Berlin, 1 April, 1938). Major Seidenfaden, whom I esteem very much, raises a number of questions which go much farther than is intended in my article, but to which I must answer in the interest of ethnological research.

(1) Major Seidenfaden writes (p. 69):—"I have not so far visited the Mawken, but would venture the opinion that the Moken are identical with the Selu'ng and Jakun living along the West Coast of the Malay Peninsula, and as such they are Proto-Malays."

As I have explained in my book *The Spirits of the Withered Leaves* (Bruckmann, 1939), which appeared in the meantime, the Moken are identical with the Selu'ng, but in no ways with the Jakun, as Major Seidenfaden seems to suppose. In the latter the Proto-Mongolid (Major Seidenfaden's 'Proto-Malay') element may predominate, but they are neither anthropologically nor ethnologically nor linguistically related with the Selu'ng.

(2) Major Seidenfaden writes:—"Could not their wavy hair be ascribed to an early mixture with the Proto-Australoids, who preceded them?"

This is not to be supposed, as the anthropological type of the Moken (illustration 20 of my book) does not offer any support for it. In fact I have been able to demonstrate Proto-Australoids among the negritic Semang (illustration 19) but not among the Moken. It is not a matter of belief in Pater Savina, or in me, but purely of scientific evidence. I would be very thankful to Major Seidenfaden if he could offer me inconvertible scientific proofs for these traditions.

(3) Major Seidenfaden writes:—"I have already expressed as my opinion that the Red Karens, though speaking a Karen language, are not racially Karens. They may represent an offshoot of the Proto-Australoids, because of their long skulls."

Major Seidenfaden's opinion goes a little too far, I believe, as no proof can be given that the Red Karens are generally long-skulled. And besides, this fact alone would not be sufficient to state a relationship with the Proto-Australoids, who differ in every way from the anthropological type of the Red Karens.

(4) Major Seidenfaden writes (pp. 70-71):—"What does Dr. Bernatzik exactly mean by Austronesians? One might perhaps group the Indonesians Austronesians, and Proto-Malays into one group. As a matter of fact I cannot see why one should not do so. Deniker is thus inclined to identify the Indonesians with the Proto-Malays, which seems quite proper." The term 'Austronesian' has been used by P. W. Schmidt, who confronts the 'Austronesians' with the 'Austro-Asiats.' Further details may be found among the various works of P. W. Schmidt. In all cases it is only a linguistic term, that has nothing to do with anthropological terms like Proto-Malays, nor with a geographical term like Indonesians, and consequently cannot be thrown together with them.

(5) Major Seidenfaden writes (p. 71):—"... a small, very primitive race which reminded Dr. Bernatzik of the Selu'ng (he says 'auf negritischer Grundlage,' though the Selu'ng are not mixed with 'Negroids, according to his own words)."

My remark means in this case that the Selu'ng-type is mixed in this region with Negrito-elements, but not that the Selu'ng are Negroids. The misunderstanding is probably due to insufficient knowledge of German.

All the other questions raised by Major Seidenfaden go (as already said) too far for the present occasion, but I shall not fail to come back to them, when working out my material. In the meantime I thank Major Seidenfaden for the interest he takes in my works.

H. A. BERNATZIK.

Science and Politics. Cf. review, MAN 1938, 178.

180 SIR.—The *Lehrbuch der Völkerkunde*, edited by K. Th. Preuss (Stuttgart, 1937), illustrates how science in Germany has been ruled by politics. You will find in it ideas for which you have no other explanation than the desire for *Gleichschaltung* of anthropology also. On the other hand you will find curiosities which only he will understand who has lived in Germany lately. For instance, it is the official view that a real understanding of a foreign 'race' is impossible; Dr. Mühlmann, however, writing about conditions and methods of anthropology is compelled to allege that "also the other races are human races" (p. 36)—for otherwise would be no ethnological work! In reality, this view is an attempt to avoid, on the one side, conflict with the official racial theory, and, on the other hand, to avoid destroying the basis of ethnological work.

Another example: the famous Americanist K. Th. Preuss contributes a very instructive essay about primitive religions. But at the end he also deals with monotheism—especially that of the Jew—and says (p. 113) that "the ethical monotheism of the Jews allows the urging of the ethical only as a means for fulfilling the unlimited will for public powers under assistance of Jahwe, since ever slumbering within them. The influence of Jahwe on the resolutions of other peoples, in order to deliver them into the hands of the Israelites by misleading their rulers, and the interpretation of the other nations' destiny as a work of Jahwe in respect of Israel, was since ever their manner, and thus the idea of his adoration by all nations could be born just at the time of their deepest misery in the Babylon captivity."

This view is not scientific but political. Dr. Preuss does not (any more than as previously) realize that monotheism is an idea, and certainly no political ambition, particularly in the old Jewish times. If he means that it was the aim of the Jews to destroy the nations in order to rule, this is nothing but the slogan you may read day by day in German newspapers.

This is no criticism. I only want to state the facts, and to note the fateful effect if science repeats 'for reasons of loyalty' the slogans of politics.

GERHARDT NEUMANN.

A Modern Egyptian Fertility Rite.

181 SIR.—On 23 February, 1937, during a visit to the temple of Deir el Bahari, on the western bank of the Nile, opposite Thebes in Middle Egypt, I witnessed an interesting fertility rite.

I was looking at a mummy which lay on the floor of the temple, when I noticed that three young native women, who happened to be near me, were taking a special interest in that object. One of them, who was dressed, like her friends, in the European manner, took her stand near the mummy, and raising her dress a little, she stepped over it, backwards and forwards some three or four times, saying the while, *En sha 'La Rabbina yiddi ni' wahid walud* ('May the Lord give me a little boy').

Such a rite, it should be noted, seems to be known to Miss W. S. Blackman, who was asked to secure bones from an ancient burial site for this purpose. (*The Fellahin of Upper Egypt*, London, 1927, p. 98.) Lane knows it too, but without the accompaniment of a prayer. (E. W. Lane, *The Manners and Customs of the Modern Egyptian*, London, 1871, 5th ed., p. 326: "Some women step over the body of a decapitated man seven times, without speaking, to become pregnant.")

I am informed by Mr. A. M. Bakir, of the University of Cairo, and of The Queen's College, Oxford, that the rite is widely practised in modern Egypt. No examples outside Egypt, on the other hand, have come to my knowledge.

J. GWYN GRIFFITHS.

The Queen's College, Oxford.

Birth of a Folk-Dance in French Equatorial Africa.

182 SIR.—The birth of a new folk-dance has been witnessed in French equatorial Africa, according to the *Revue de Paludisme et de Médecine tropicale*, 15 July, 1939, 1, 97, which quotes G. Grall's article in the *Annales de Médecine et de Pharmacie coloniales*, January-March, 1935, No. 1. The Bandas of Oubangui-Chari have invented a 'sleeping-sickness dance' based on the behaviour of the French medical service in the fight against trypanosomiasis. All the dances of the Bandas are said to be imitative, and agricultural work is done to the rhythm of song and tom-tom. The new dance consists of four figures:—

(1) Most of the dancers form a circle to represent the inhabitants of a village and agitate their bodies to the fairly quick rhythm of the tom-tom, while three men go round the circle, one of them palpating the necks of the 'inhabitants,' pretending to needle their cervical glands, and handing some of the dancers to his two companions, who place them in the centre of the circle.

(2) One of the dancers now plays the doctor and pretends to perform lumbar puncture with a piece of bamboo on the 'sick men' in the centre of the circle.

(3) The tom-tom beats less loudly and more slowly, while the actions of the dancers become more feeble, until they all lie down motionless, except two or three who go round the circle, shaking the 'sleepers' and pretending to be unable to wake them.

(4) Several performers arrive, who go through the motions of giving intravenous injections into the 'sleepers' antecubital fossae, while the tom-toms are beaten more loudly and quickly, and, when the whole circle has undergone 'injection,' the rest of the performers leap up and yell, ending the dance with a very lively rhythm to denote recovery from the trypanosomiasis.

This dance has spread through all the tribes of the Bandas, and its social repercussion is that the natives

come forward much more willingly for medical examination and treatment. This may partly explain the *raison d'être* of the dance. It would be interesting to know whether the dance developed spontaneously among irresponsible individuals, or whether it was deliberately instituted by the elders for the purpose of educating the natives concerning the beneficial results of treatment in trypanosomiasis.

CANNING SUFFERN.

Ear-ornaments from Air, Sahara. (Illustrated). (Cf.

183 *J.R.A.I.*, LXV., 1935. 299 ff.

See.—Mr. A. J. Arkell described recently under the name of *tsagūr* an ear ornament worn by 'all Kinin married women suspended from a hole pierced in the top of the right ear.' (*J. R. Anthr. Inst.*, LXV., 1935, pp. 299 et seq., pl. XVII, 4, XVIII, 2, XIX, 1).

He remarks (p. 299) that such ornaments are not mentioned by Mr. F. Rennell Rodd in *The People of the Veil* (1926) and Mr. Rodd confirms (Arkell, *l.c.*, p. 306) that he had no recollection of ever having seen this or any similar ornament worn by women in Air, either in 1922 or in 1927.

As the Darfur Tuareg, or Kinin came to Darfur only a few years ago and 'mainly belong to the Kel Geres 'section' (Arkell, *l.c.*, p. 299, n. 3), it seemed worth while to inquire about the possible existence among the Air Tuareg of an ornament of peculiar interest since it has been connected with similar objects from the Garo Hills, Assam (Arkell, *l.c.*, pp. 300 et seq., pl. XVII, fig. 3).

Questioned about the matter, Lieutenant G. Joubert, of the *Groupe Nomade d'Agades*, presented to the collections of the *Institut Français d'Afrique Noire* two specimens of what he calls *tsagūr*, evidently the same name as the *tsagūr* of Mr. Arkell, the *tsaggeouert* (pl. *tsaggeouert*) of the Père de Foucauld (*Dict.*, II, 1920, p. 577), the *tsagjort* of Barth (*Reise*, 1858, V, p. 706).

Lieutenant G. Joubert writes (18.4.1939): "Cet ornement se fait de plus en plus rare et se passe de mère en fille, car on n'en fabrique plus. Comme pour tout ce qui concerne les objets ou les choses d'autrefois, les Touaregs, interrogés, répondent régulièrement: 'cela vient des hommes d'avant, il y a très longtemps'."

A characteristic feature of the *tsagūr* of Darfur, as well as of Assam, is the boat-shaped terminal pendant. Very remarkable fact, in both the Air specimens the boat-shaped pendant is not made of a primitively crescentic piece, but of a circular ornament purposely broken on both sides to give it the required boat shape.

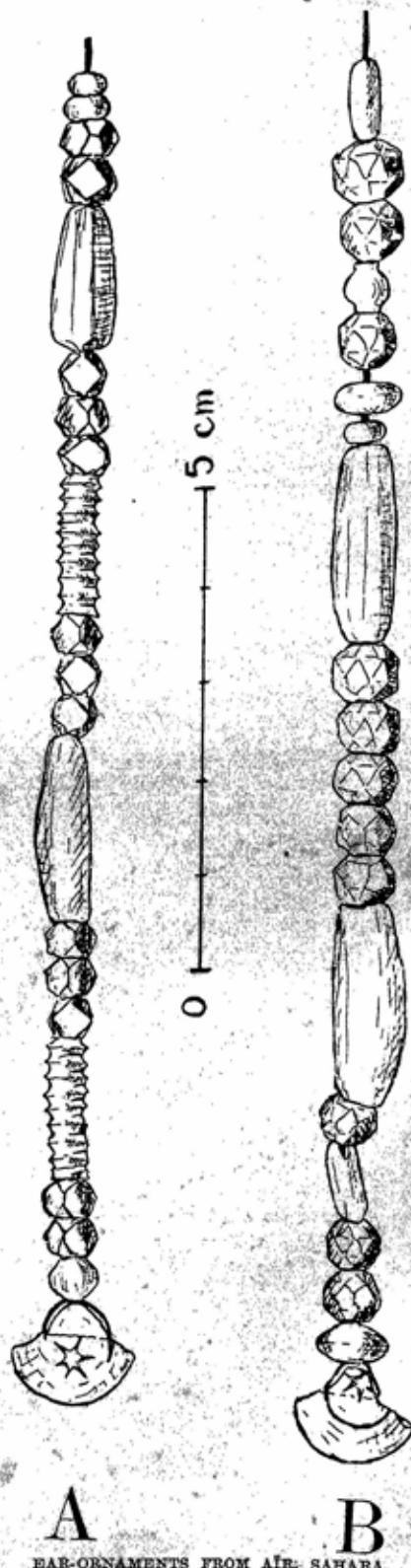
Our first specimen (A) is made of following beads: 1, garnet-red glass; 2, green glass; 3, brass (faceted); 4, garnet-red glass; 5, opalescent glass (slightly carinated); 6-8, garnet-red glass; 9, brass (cylindrical, annulated); 10-12, garnet-red glass; 13, whitish blue and grey (shell); 14-16, garnet-red glass; 17, brass (cylindrical, annulated); 18-19, garnet-red glass; 20, brass; 21, garnet-red glass (terminal pendant).

The second specimen (B) has: 1, garnet-red glass; 2-3, Mars-red carnelian; 4, golded blown-glass; 5, Mars-red carnelian; 6, pale greenish yellow glass; 7, black wood (possibly of *Dalbergia melanoxylon*); 8, opalescent glass; 9-13, Mars-red carnelian; 14, whitish blue (shell); 15, Mars-red carnelian; 16, opaque yellow glass; 17, Mars-red carnelian; 18, garnet-red glass; 19, pale green glass; 20, garnet-red glass (terminal pendant).

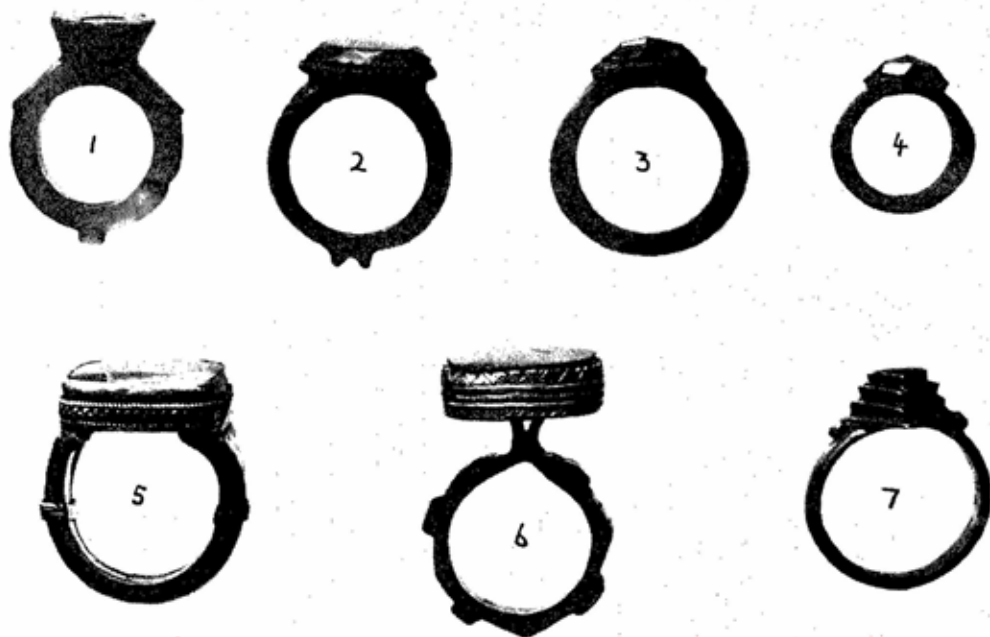
The discovery of typical *tsagūr* in Air considerably extends the westward distribution of such ornaments. Whether more western (Ullimiden, etc.) or more northern (Ahaggar) groups have similar objects has still to be made out.

THEODORE MONOD.

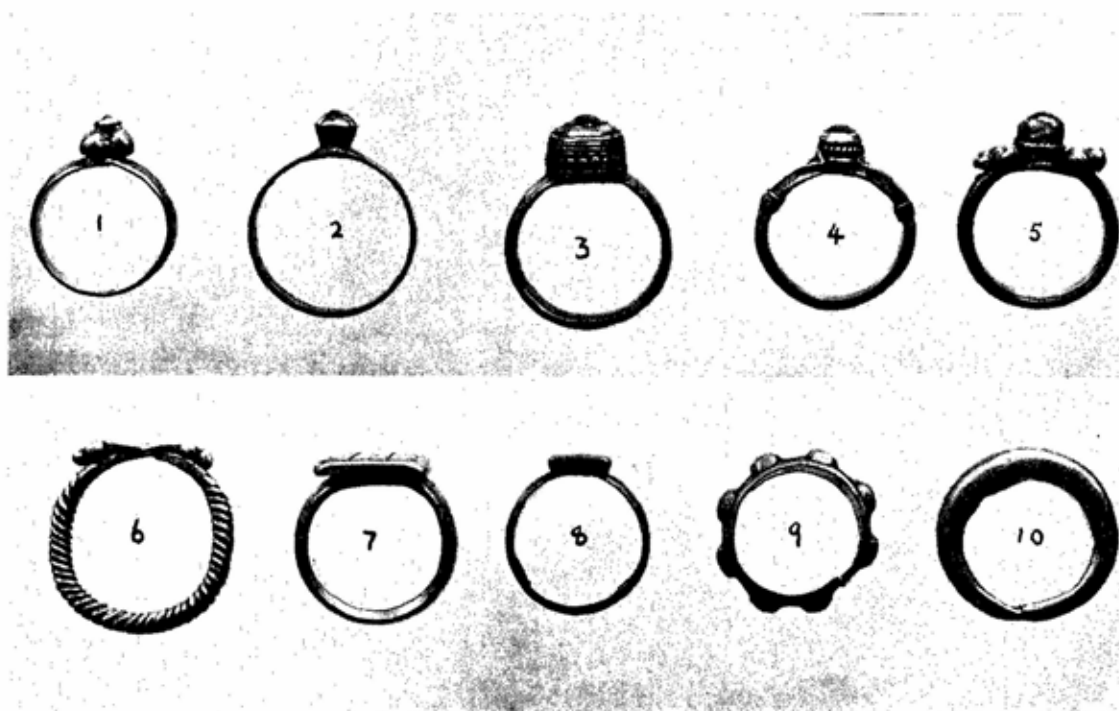
Institut Français d'Afrique Noire, Dakar.



EAR-ORNAMENTS FROM AIR, SAHARA.



A. 1-7 FINGER-RINGS WORN BY TUAREG AND (6) BY A WOMAN FROM BORNU.
Actual size: for detailed description see footnote on opposite page.



B. 1-10. SILVER FINGER-RINGS WORN BY TUAREG (KININ) IN DARFUR.
TUAREG FINGER-RINGS.

MAN

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ORIGINAL ARTICLES.

Africa, North

With Plate M.

Arkell

'T'ALHAKIMT' AND 'TANĀGHILT,' SOME NORTH AFRICAN FINGER-RINGS, ILLUSTRATING THE CONNEXION OF THE TUAREG WITH THE 'ANKH' OF ANCIENT EGYPT. By A. J. Arkell, M.B.E., M.C.

184 I am honoured by the note which the Hon. F. R. Rodd has appended to my article 'Some Tuareg Ornaments and their Connection with India' in *Journ. R. Anthropol. Inst.* LXV, p. 297 ff; and I am happy to think that I have convinced him of the correctness of the main part of my thesis, that the *t'althakimt*—I adopt Mr. Rodd's no doubt more correct spelling—and the *tsagūr* are ornaments of Indian origin.

The Tuareg 'T'althakimt' and 'Tanāghilt,' and the 'Ankh' of Ancient Egypt.

I was at first much attracted myself by his suggestion that the *t'anāghilt* is, and the *t'althakimt* may be, descended from the *ankh* of ancient Egypt, and only discarded it after due consideration. It does not explain the connexion that must exist between my *tanāghilt* No. 10 and *t'althakimt* No. 3 (*J.R.A.I.*, l. c., plate xvii, fig. 1), and between *tanāghilt* No. 11 and *t'althakimt* No. 4 respectively, nor the knobs on the metal *tsagūr*, the last but one from the right in *J.R.A.I.*, plate xvii, fig. 4, to which I drew attention on p. 299. And, if the *tanāghilt* or the *t'althakimt* are descended from the *ankh*, how is it that no intermediate forms have come to light? Silver and carnelian are not such perishable materials that Libyan or Saharan graves would not have disclosed the 'missing links' between these ornaments and the *ankh*. Nor has any real connexion been established between ancient Egypt on the one hand and the *Mulethamin* or Tuareg people on the other. There may or may not be a connexion between the *Temehu*, a Libyan tribe known to the ancient Egyptians, and *tamāshik*, the present language of the Tuareg, but one sees in Africa to-day tribes abandoning one language and adopting another in the course of a generation or two, so that even if this connexion were established, it would not necessarily connect the Tuareg with ancient Egypt.

Similarity of appearance alone is unreliable. We require some definite historical fact to corroborate the circumstantial evidence of appearances; and it was owing to the absence of such corroboration that I gave up another theory, that the common form of the *t'althakimt* was a degenerate form of female figurine representing the head and the other two the breasts. Figurines of the Great Mother are known from both ancient Crete and ancient Libya. Sir Arthur Evans has demonstrated the connexions between Libya and Crete; and the Tuareg are generally accepted as having a Libyan origin, so that this theory was attractive.

DESCRIPTION OF THE FINGER-RINGS IN PLATE M. SCALE 1/2 ACTUAL SIZE.

- A. 1, 2. Carnelian rings (made at Cambay) worn by Tuareg (Kinīn) in Darfur.
- 3, 4. Carnelian rings made at Cambay for export to Syria via Cairo.
5. Silver ring set with a glass imitation of a large square stone, worn by Tuareg (Kinīn) in Darfur; said to have been made at Aīr.
6. Silver ring set with carnelian. Worn at El Fasher by a woman from Bornu.
7. Brass ring worn by Tuareg (Kinīn) in Darfur; said to have been made at Kano.
- B. 1-10. Various silver rings worn by Tuareg (Kinīn) in Darfur.

But the only possible link between the figurines of ancient Libya and the *t'alhākimt* of the last two centuries that I could trace were the figurines of Sara Dheri, in connexion with which I was assured by Mr. K. de B. Codrington that there are parallels in Indian art to the complete disappearance of the legs in motifs derived from the female form. This, however, did not form a sufficiently complete series; and had I been on the right track the earliest *t'alhākimt* should have been of this common form, whereas in actual fact it is of the more 'male' form (*J.R.A.I.*, plate xx, fig. 9), and even so does not necessarily date from before the seventeenth century A.D.

I think that if plate xx, fig. 9 is compared carefully with figs. 7 and 8 in the same plate, it will be recognized that fig. 9 must be a development of the carnelian ring with the three bosses; and I am confident that authorities in India will be able to confirm that the tiny addition which changes fig. 8 into fig. 9 has the effect of changing an ordinary signet ring into a *lingam-yoni*. If this is the case, it seems to be an easy step to add to the ring as a variant the girdle and *yōni* of the Indian goddess of fertility, which I am more than ever inclined to think is the correct explanation of the origin of the common form of *t'alhākimt*.

Some North African Finger-Rings.

I have had further proof of the connexion between the *t'alhākimt* and the ring, since I wrote my original article. *Chhala*, the Indian name for the *t'alhākimt* is the common Hindustani word for 'finger-ring,' according to Messrs. Ranchodlal, Girdhurlal & Co., who also inform me that *nakhli* merely means 'ear-ring' in Hindustani.

Thus in India the *t'alhākimt* is a ring: indeed, I now suggest that the Hausa form *talhātana* gives the clue to the origin of the name *t'alhākimt*, and that it is derived from the Arabic *الخاتم* (al khātim) 'the signet ring.' Can Mr.

Rodd suggest a meaning for '*tanāghilt*'? And on further inquiry I find that the Kinin have a greater range of rings than I had at first realized, and it is most significant that they say that rings may be worn on the *tādnit* in the place of the *t'alhākimt*, as they are in *J.R.A.I.*, plate xix, fig. 1.

In Plate M, four rings (Nos. A. 1, 2, 5 and 6) obtained from Kinin at El Fasher which were so

worn. Figs. 1 and 2 are of carnelian and were obviously made at Cambay, but all their owners knew about them was that they had been inherited from grand-parents. The ring which Mr. Rodd brought from Air, now in the Pitt Rivers Museum (*l.c.* p. 305), is very similar to fig. 1 in design. Both rings have three knobs, not one as Mr. Rodd thought. His ring is of glass and not of stone. It shows considerable wear, but traces of the mould in which it was cast can still be seen, and I have no doubt that it is an imitation made at Gablonz in Czechoslovakia of a carnelian ring from Cambay.

Fig. 5 is a large silver ring set with a large square stone (? glass) and said to have been made at Air.

Fig. 7 is of brass, is known as *tenellid*, and said to have been made at Kano. It seems reminiscent of the *t'alhākimt*. Fig. 6 was obtained from a Bornu woman, and was said to have been made in Bornu or Kanem. It is of silver, and set with an oval carnelian of Cambay origin, and was worn on a string round the neck. A similar ring in the Ashmolean Museum (Fortnum Coll. No. 687), was bought at Aswān in 1867.

Figs. 3 and 4, which resemble fig. 2, were imported by Ghulam Ahmed Hindi of Cairo, from Cambay, where they are made. He informs me that the only demand for these rings to-day comes from Syria, where they are still in use as fertility charms. Rings in the Fortnum Collection, Nos. 679 and 680, are very similar to my No. 3. They were bought at Damascus and Jerusalem respectively, and there is no doubt whatever that they also were made at Cambay. The workmanship is rather more elaborate.

Plate M (B.) gives a further series of silver rings obtained from the Kinin of El Fasher. These rings may also be worn on the *tādnit* in place of the *t'alhākimt*.

No. B.1, which has one ball superimposed on three others is known as 'the castle' (*abu qasr*). The stones in B.3, B.4, and B.5 are imitation turquoises. B.3 was called *farūs*, and B.4 *tasondert*. B.6 is known as the 'ram's horn' (*germ el kabsh*). Fortnum Collection No. 688 is a similar ring, with only one ball at each side of the bezel. No. 686 closely resembles my No. 9. Both these Fortnum rings were bought at Aswān in 1867, and are probably types general to the Anglo-Egyptian Sudan rather than peculiar to the Tuareg. B.7 is known as *debāli*, and has

on the bezel the following charm in arabic figures :—

| | | |
|-----|-----|-----|
| 121 | 126 | 119 |
| 120 | 122 | 124 |
| 125 | 118 | 123 |

the numbers adding up in every direction to 366, three times the number in the centre square. B.8 has the field of the bezel divided diagonally by cross lines into four smaller fields, in each of which is a small cross. B.4, B.5, B.8 were all said to be the work of Ahmed Hashim, a well-known Kel Geres smith who left Darfur in 1935 for Air; all the other rings are said to have been made by Kinin smiths.

Enough has been said to show that rings have an important place in the Kinin woman's jewellery case. It is not only as an article of adornment but owing to its merit as a fertility charm that the ring is so favoured. That a ring has some magic power to facilitate birth is, I believe, an old superstition in the East. In Egypt its place is sometimes taken by a necklace over which in cases of difficult labour the patient has to step.

A carnelian ring, being of the colour of blood, will be doubly potent for such a purpose. It is significant to find carnelian rings being imported from Cambay by Syria as fertility charms to-day. To the Indian mind it is no doubt trebly potent if the ring is itself a *lingam-yōni*.

It was probably an accident that the type of carnelian ring that became common should have been a copy of a type of ring which I have shown existed in Roman times. I think the fact that this triple-bossed ring had been invented at such an early date is very important in the present inquiry. An expert in the history of design in

rings should be able to throw further light on the matter.

The Kinin look on the *tanāghilt* as derived from the *t'alhākimt*. Tradition is never lightly to be discarded. If in this case tradition is correct, the *t'alhākimt* cannot have been copied in silver by the smiths of Air until some time after its introduction to the Tuareg. In Air the carnelian original, being of Indian manufacture, would not be always obtainable, and no one there would be able to work carnelian, while workers in silver would be numerous and skilful. It is then just what I should expect, to find that the older *t'alhākimt* is found wherever the Tuareg have resided, while the more recent *tanāghilt* is confined to the area where it was subsequently invented. If, however, the *tanāghilt* is directly derived from the *ankh*, presumably they have been known in some form or other since the days of Ancient Egypt, while the *t'alhākimt* has not been going so long. How then does Mr. Rodd account for the more restricted distribution of the *tanāghilt*?

Further, according to my theory it is only to be expected that the belt and the serrated edge of the *t'alhākimt* should be missing in the *tanāghilt*, since these details, though full of significance to the Indian mind, would not be appreciated by the Tuareg, and so, being looked on as unimportant, would tend to be omitted. The tendency to drop the protuberances on the ring of the *tanāghilt* can be explained in the same way.

I feel sure, however, that it is a true instinct that leads Mr. Rodd to see a connexion between the *ankh*, the *t'alhākimt*, the *tādnit* and the *tanāghilt*. They are all in origin fertility-charms, and somehow or other all embody the idea of the Great Mother or the physical organs of birth.

ON THE CLASSIFICATION OF THE HALF-HAMITES OF EAST AFRICA. By G. W. B. Huntingford.

185 Mr. Driberg's division of the Half-Hamites into Nilo-Hamites and Hamito-Nilotics (MAN, 1939, 19) is actually the linguistic division, and is practically the same, except for terminology, as the classification I suggested in *Bibliotheca Africana*, 1929, III, 146, where I grouped them all as Nilo-Hamitic in three divisions:

A. Northern group: Lotuko, Teso, Dodoth, Topotha, Ajie.

B. Masae group: Masae and its dialects, Samburu, Il-Tiamus, Turkana, Karamojon.

C. Nandi group: Nandi and its dialects, including Suk, Kony, Tuken, Kipsikis, Keyo, and Dorobo.

At a later date I transferred Turkana and Karamojon to Group A. Further analysis of these languages has convinced me that they are, in spite of varying degrees of 'Hamitic' trapping, fundamentally Nilotic, and differ from the latter mainly in that they are sex-determining. Further sub-classification may be made to the extent of this feature, and accordingly I suggest that the

whole should be re-named and re-classified as Hamitic. Further, if Nandi and Masae are follows : Hamitic, how is it that certain basic words are

NILOTIC I: Not sex-determining.

- A. Northern group: e.g., Dinka, Nuer.
B. Southern group: e.g., Acholi, Alur, Lango, Luo.

- C. Intermediate: e.g., Shilluk (with rudimentary sex-determination).

} = NILOTIC.

NILOTIC II: Sex-determining.

- A. Northern group: e.g., Bari, Lotuko, Teso, Dodoth, Topotha, Ajie, Turkana, Karamojon.

= NILO-HAMITIC.

- B. South-western group: e.g., Nandi and dialects.

- C. South-eastern group: e.g., Masae, Samburu.

} = HAMITO-NILOTIC.

Here again the arrangement is the same as in Mr. Driberg's sub-classification, though the terminology is different.

It is to be hoped that some day we shall agree

found to occur in Nilotic and Nandi-Masae, but not in Nandi-Masae and Hamitic (e.g., Gala)?

A few examples will make this clear:

2. The so-called Hamitic sentence order of

| | NILOTIC : | NANDI : | MASAE : | GALA : |
|--------|-----------|--------------|---------|--------|
| fire | - - - - - | mach [Dinka] | ma | ibidda |
| tongue | - - - - - | lyeb [Dinka] | nelyep | afan |
| eye | - - - - - | waj [Luo] | kon | igga |
| forest | - - - - - | tim [Dinka] | tim | chaka |
| animal | - - - - - | dyan [Lango] | tiony | binaza |
| cow | - - - - - | dhian [Luo] | tany | ola |
| | | | chajito | |
| | | | kitej | |

as to the position of the Suk. Mr. Driberg regards them as marginal; but though, as he says, their culture (and I would add language) is in the main Hamito-Nilotic (using his terminology), the possession of certain other traits does not necessarily remove them from this class. That they have been heavily 'acculturated' by the Turkana is undoubted, and it is to the latter that they owe the labret, rectangular shield, and finger- and wrist-knives, as well as the velar fricative (X), which is not found in Hamito-Nilotic. But the fact of acculturation should not be pressed too far in classification. The Dorobo, for instance, whose culture contains a good deal that is derived from the Nandi, can be classed with them only from the standpoint of language: physically they are mesaticephals, the Nandi being dolichocephalic, and the basic elements of their culture are non-Nandi. Suk culture is basically Nandi, and I feel that they should definitely be grouped with the Hamito-Nilotics.

Linguistic criteria.

1. For some reason it has become the fashion to describe Masae and Nandi as fundamentally Hamitic; or, as Mr. Driberg says, "the Nandi group is closer to its Hamitic origins linguistically." Granting that there are certain elements in these languages which are not Nilotic, the fact remains that if, e.g., Nandi is stripped of its non-Nilotic trappings, it shows great morphological resemblance to Nilotic, and little to

verb, subject, object, is no criterion, because there is no evidence that it is Hamitic, and it merely serves to distinguish Nandi and Masae from the others. It is true that Miss Werner called it Hamitic, but then she classed Masae as Hamitic (*Language Families of Africa*, chap. v.), and she adds that "some Hamitic languages have, no doubt through outside influence, adopted the Sudanian order—subject, verb, object." Somali, curiously enough, has the order subject, object, verb" (p. 94). In Gala also the order is subject, object, verb, and the explanation is that this is the Hamitic order, verb-subject-object being not Hamitic, but a peculiarity of Nandi and Masae.

3. As to sex-determination, we may note that there are two distinct methods:

(1) By means of the Hamitic affixes K (masc.) and T (fem.), as in Gala and Somali, and also, I believe, in Nandi, where the singular suffix T and plural suffix K can be explained as a large-scale and invariable extension of the Hamitic principle of polarity, where the singular is of a different gender from the plural (though in Nandi the sexual difference has been forgotten.)

(2) By means of the non-Hamitic affixes L (masc.) and N (fem.), as in Masae (article, OL, masc.; EN fem.), and also in certain pronouns in Bari, Turkana, and Lotuko. I suggest that something like the Nubian words id, 'man,' and en, 'woman,' may be the origin of this form of sex-determination. (D and L are interchange-

able, e.g., Bari ɲedeb = Nandi ɲelyep; Nubian iskodu = Nandi sokol.)

The amount of sex-determination in these languages is roughly as follows:

| | | |
|-----------------------------------|----------------------|--|
| 1. Nilotic II. A.—Nilo-Hamitic. | Bari, Lotuko, etc. : | In certain pronouns. |
| 2. Nilotic II. B.—Hamito-Nilotic. | Nandi : | Names of cattle, classes of people, tribes; [all substantives, now without sexual significance]. |
| 3. Nilotic II. C.—Hamito-Nilotic. | Masae : | All substantives, and pronouns as in (1) above. |

Cultural criteria.

1. Age-sets may be added as an important cultural difference, though here again there is overlapping, and the evidence is not altogether decisive. They are found among (1) Hamito-Nilotes, (2) Nilo-Hamites, (3) Nilotes (using Mr. Driberg's terminology).

(1) Those of the Masae and Nandi are of marked Hamitic type, with military and executive functions. They are, moreover, intimately connected with circumcision. In the case of the Nandi they are to some extent behaviouristic, like those of the Nilotes.

(2) Of Nilo-Hamites, the Lotuko have age-sets with military functions, associated with a non-mutilating initiation; the Bari have no initiation, but age-sets whose functions are those of mutual aid and support.

(3) Of Nilotes, the Dinka, Nuer, Shilluk, and Anywak have age-sets, the first three associated with a mutilating initiation (but no circumcision). These sets are distinct from the Hamitic type, and are to be described as behaviour classes, since they determine patterns of behaviour in addition to the kinship system. Those of the Anywak are executive, more markedly so than those of the Masae and Nandi.

We appear, then, to be dealing with two distinct types of age-set, the executive or Hamitic type, and the behaviouristic or Nilotic type, which are thus distributed:

HAMITIC TYPE:

Hamito-Nilotics : Masae, Nandi.

Nilo-Hamitics : Lotuko.

Nilotics : Anywak.

NILOTIC TYPE:

Nilotics : Dinka, Nuer, Shilluk.

Nilo-Hamitics : Bari.

It may be of interest to note that among the Kapchepkendi Dorobo, who have taken over the system from the Nandi complete with age-names, sub-divisions, and intervals, the age-sets have no executive or military function at all, but are purely of the Nilotic or behaviour type.

2. *Rainmaking*. The use of rain-stones, as distinct from the practice of rainmaking, is a more conclusive cultural difference. The Nilotes (Dinka, Shilluk) on the one hand, do not use them, nor,

on the other hand, do the Hamito-Nilotics (Nandi, Masae); and it seems that this feature is peculiar to the Nilo-Hamites (Lotuko, Bari). In other words, the use of rain-stones may be looked upon as a cultural trait, actual or potential, of the Nilo-Hamites but not of the others.

3. Some of Mr. Driberg's other criteria do not seem to be entirely convincing.

(a) *Shields* : Oval shields, he says, are Hamito-Nilotic; rectangular, Nilo-Hamitic. But is it not the case that the Hamitic shield is either circular or oblong (i.e., nearly square) and the Nilotic rectangular but very narrow? The Nandi, Masae, and the Nilotic Luo have the oval shield; and so, if mere shape, oval against rectangular, is the criterion, the Nilo-Hamites in this respect show more Hamiticization than the Hamito-Nilotics.

(b) *Metallurgy* : It is hardly true to say that the Nandi and Masae have no metallurgy, for they (or rather their smiths) make their own iron weapons and tools. It would, I think, be more satisfactory to take the attitude towards metal-workers as the criterion, for it is possible to make a classification according to this attitude, starting with the Hamitic attitude of strong contempt towards smiths:

| | | |
|---------|---|---|
| Gala | } | Hamitic attitude : strong contempt. |
| Somali | | |
| Masae | } | |
| Nandi | | |
| Bari | } | Modified Hamitic attitude : mild contempt. |
| Lotuko | | |
| Dinka | } | |
| Shilluk | | |
| | | Nilotic attitude : equality or respect. |

(c) *Hunting* : The Masae, it seems, do not hunt at all, and despise hunters. But the Nandi, while they cannot be called hunters in the sense that the Dorobo are hunters, do hunt, and do eat game. They do not, it is true, go off on spare afternoons with their bow and their dogs, like the Bantu Kakumega, hunting small game;

though I have seen organized parties of ten or more men systematically hunting bushbuck. But (1) they have cleared Nandi of lion; (2) they frequently and successfully hunt leopard; (3) till recently they dug oblong pit-traps for buck (such pits could still be seen in Nandi up to about 1925); and (4) they have a hunting spear with short blade, long haft, and short butt.

(d) *Rainmakers*: It is possible that the few lines in Hollis (*Nandi*, pp. 49, 52) are responsible for the idea that rainmaking is unimportant among the Nandi. The orkoivot is the chief rainmaker (*uinet* < u, 'to move,' 'because he "moves the universe"', resorted to in times of drought, and also in times of flood. The latter, in a country with heavy rainfall, is likely to be

nearly as disastrous as lack of rain, and to stop rain is as much a function of the rainmaker as to bring it.

We find then that the Nandi, who form a numerically important section of Mr. Driberg's Hamito-Nilotics, do not conform to the cultural classification in at least three respects, and I feel that after all the linguistic classification is still the more satisfactory. I do not mean that language offers the best basis for classification, but merely that in the present state of things it is better than other cultural or physical aspects. Language is a part of culture, even if a specialized part, and in this case there is less overlapping; it is easier, too, for a single culture-trait to spread than it is for a single linguistic trait.

A LINK BETWEEN INDIA AND CRETE. By J. G. Aravamudan, Curator of the Numismatic Section, Government Museum, Madras. Illustrated.

186 Pottery vessels recently discovered at Maniyar Math in Rajgir in enclosures attributable to 'an age roughly anterior to the 'Christian era' are said to bear 'spouts of various designs varying from 4 to 20, and in one case even '34' K. N. Dikshit, *Ann. Bibliography of Indian Archaeology*, (1936) 3, xi). The only one of these of which an illustration has been published is a vase with numerous spouts opening from its upper half and with numerous indentations pricked into the lower areas of its wall. Apparently all the finds were of this type. On the spouts were found

tration as indentations may really be perforations (Fig. 1). Associated with these vessels were found terra-cotta images of hooded snakes and 'a large stone slab containing a number of 'hooded figures.'

The god Mani Naga was 'the protector and 'rain-giver of Rajagriha' (Rajgir): the name of the god implies association with the serpent. So it has been suggested that the Maniyar Math was probably 'the site of an old temple dedicated 'to Mani Naga' and that the vessels 'may have 'been used by the distressed inhabitants of 'Rajagriha praying for rain.'

These vessels appear to be similar to some found far away in Crete and described by Sir

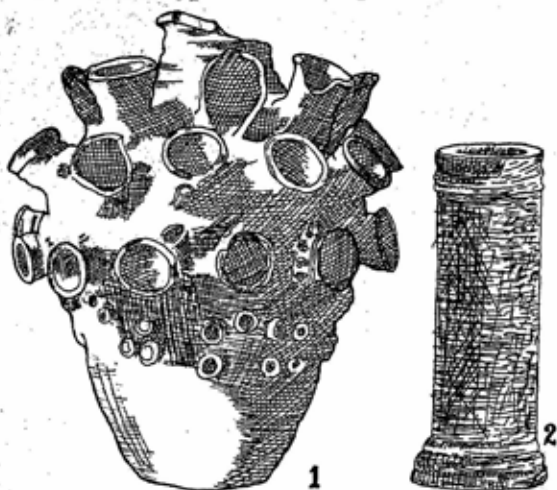


FIG. 1. VASE FROM MANIYAR MATH, RAJGIR.
FIG. 2. TUBULAR VASE FROM CRETE.

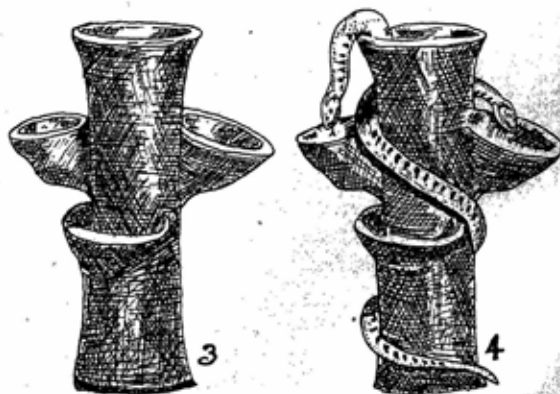


FIG. 3. OFFERING CUP.
FIG. 4. SNAKES ASCENDING THE SIDES.

designs, among which are those of 'serpents 'sieves, animals, etc.' What appear in the illus-

Arthur Evans, *The Palace of Minos*, IV, 1, pp. 138-68. One type of Cretan objects resembles

drainage tubes, open at both ends (Fig. 2)¹ Of another type is a similar tube closed at one end, the tube being thus transformed into a vessel: it is also provided with 'two pairs of cups, symmetrically attached' to the sides: the cups 'could only have been made to contain 'some kind of offering' (Fig. 3). Yet another type of vessel resembles the one just mentioned, but snakes are 'moulded in relief' on it 'as if ascending the sides' (Fig. 4). These types seem to be 'simply adaptations of drain- or water-pipe sections' for 'the snakes' own convenience 'as a place of shelter,' and they were further provided with cups outside to supply them with 'milk or some other liquid nourishment.' These seem to have originated in the fondness of the snakes of the place for 'water-conduits and land-drains.' (*l.c.*, p. 148).

Another type is furnished by an object 'which, from its characteristic outline, combined with the holes that mark the cells, may be recognized 'as three sections of a naturally formed wild 'honey-comb'; a snake is coiled round this object (Fig. 5). The affection of snakes for honey—or at least for the grubs in the cells of the honey-comb—should have given rise to this type (*l.c.*, p. 156). Yet another type is a peculiar jug: two spouts spring from its wall: below the neck the wall is riddled with holes; and the bottom likewise; a snake is moulded on the jug and peeps into its open mouth (Fig. 6). While the members of the drain-pipe group are distinct from the honey-comb type, the jug combines them: both spouts and perforations (*l.c.*, p. 156). The transmutation of the cups into spouts was perhaps among the modifications that had occurred in the course of the crossing.

Still another group of similar objects has been found in Crete. On one of these types snakes are modelled so that they peep into a cup opening from the shoulder of the vase (*l.c.*, p. 163, Fig. 122). Another has a snake painted, journeying towards a cup springing from the shoulder (Fig. 7). On a third type a modelled serpent reaches the open mouth of the vase (Fig. 8). While all these vases are in shape, none of them bears indentations or perforations, like the Rajgir vase-shaped type. The two Cretan types mentioned last have

an additional interest since they bear designs of other objects as well as serpents: a rosette and a crab are painted on one, and an indistinct design on the other. These vases seem to belong to rather late times. The earliest known example



FIGS. 5-9. VASES FROM CRETE: see footnote for references.

of this class of vases seems to be a vessel in the shape of a female figure with snakes coiling round the neck (*l.c.*, p. 163, fig. 121), but this vase has the appearance of being an adaptation of an earlier type of vessel which was simply a vase with spouts at the sides and a mouth closed with a stopper. Obviously, the stopper was transformed into a head, the spouts into arms, the torso into a human chest, and two protuberances were added to simulate breasts. We seem to have therefore no justification for tracing the origin of these types back to either the drain-pipe or the honey-comb type.

The Cretan specimens would thus seem to be

¹ Fig. 2=Evans, *Palace of Minos*. IV. i. p. 140, fig. 110a.
fig. 3=p. 140, fig. 109 (4, 5, 6). fig. 6=p. 156, fig. 119a.
fig. 4=p. 142, fig. 111. fig. 7=p. 163, fig. 124.
fig. 5=p. 155, fig. 118a. fig. 8=p. 164, fig. 123.

multifarious in origin. Their evolution has been also equally multifarious and has led to the rise of a number of varieties. Nos. 2 and 8 are assigned to very early typological stages, as both of them are devoid of cups and spouts. No. 8 is, however, placed a stage lower than No. 2 as it differs in bearing a snake. Nos. 3 and 9 are allotted to the same stage, as they agree in not having developed cups or spouts, and also in not bearing a serpent. No. 7 is assigned to a lower stage than Nos. 4 and 6 as the serpent is painted in the flat, instead of being moulded as on Nos. 5, 6, 8.

The spouted and perforated vessels of Rajgir embody features found in one or other of the Cretan groups. The spouts are similar in shape to the Cretan: their numbers vary, as on the Cretan specimens. The serpent is shown on both the Rajgir and the Cretan vessels: it matters little whether it is moulded or painted. The vase-shape is the only one so far known to India: it is not unknown to Crete. The indentations—probably perforations—on the wall of the Rajgir type correspond to the perforations in the Cretan jug. In both the spouts spring from the upper half, and the holes are confined to the area below the neck. While sieves and animals appear on the Rajgir vessels in addition to snakes, we have similar additions—a rosette and a crab—on the Cretan.

The resemblance is as close as one could hope for. The vessels from Rajgir and from Crete furnish proof of contact, the precise nature of which, however, could be determined only when further evidence accumulated.

Of the Cretan objects the spouted and perforated jug seems to be early in time, while the vase-type seems to be late. The course of development of the Rajgir vase type, embodying

perforations, and designs of objects other than snakes, does not therefore seem to be yet susceptible of being determined. A typological development is perhaps traceable, but we seem to have little means of settling the chronological sequence. (*Arch. Survey of India: Ann. Rep.*, 1908-9, p. 98, pl. 35, 2.)

The function of the Rajgir vessels is by no means obvious. The similarity to Cretan vessels associated with serpents and the association *in situ* with serpents establish their relation to a snake-cult, but these do not go farther and indicate a necessary connexion with the bringing down of rain. It may be that the Rajgir type pictures the clouds from all quarters entering the vase through the spouts stretching out from the upper half in all directions (except downward), and emerging as showers of rain through the perforations that open out of the lower half; but we cannot reconcile this fancy with the association of the vessel with serpents.

A vessel found in a prehistoric tomb at Kadamalaiputhur, near Perumbair, in southern India, seems to be the only similar Indian object. This earthen jar bears four spouts, evenly spaced, on its shoulder (Fig. 9). While the similarity to the vases from Crete, which carry spouts but do not bear perforations, is obvious, no association with the serpent is traceable. None the less, it is not difficult to see that the jar could have served both as a receptacle for the drink of serpents and as a shelter for them when they drank it dry: a different function is not obvious. So a connexion of the vessel with the serpent need not for the present be negated.

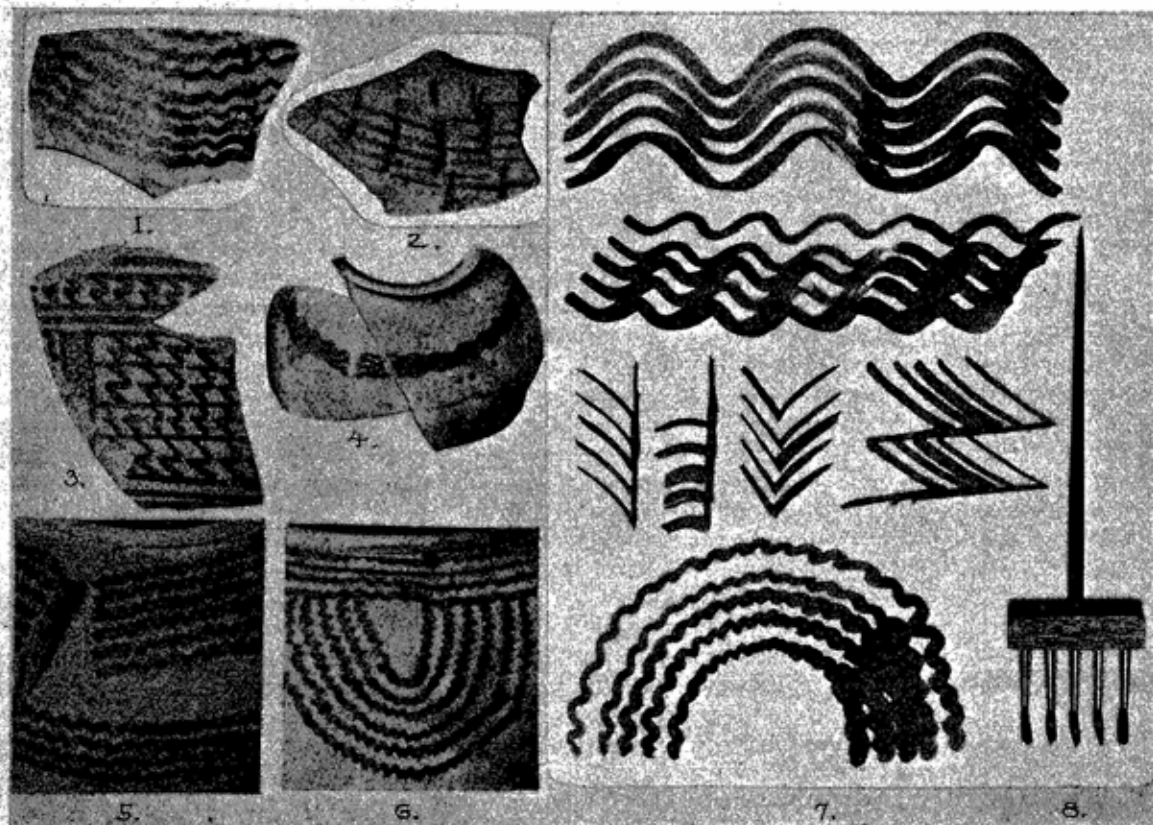
I have noticed numerous other links and I am dealing with them in a work that is under preparation.

A NOTE ON A MULTIPLE-BRUSH DEVICE USED BY NEAR EASTERN POTTERS OF THE FOURTH MILLENNIUM B.C. By Robert J. Braidwood, *Oriental Institute, Chicago. Illustrated.*

187 In 1920, Sir Flinders Petrie in his *Prehistoric Egypt* (p. 18) called attention to a singular method of applying the characteristic wavy lines of paint on the Predynastic Decorated Pottery. Sir Flinders remarked that "All of the line patterns are largely influenced by a habit of holding three or four brushes together, in order to speed up the work." Groups of lines were noticed as always being in multiples of 2, 3, or 4, according to the number of brushes held

together. "This system of work," said he, "extended to the spirals, which were made by a group of brushes, as shown by the thick color beginning all along the same radius." Unfortunately, the great mass of Decorated Predynastic pottery has been published in line drawing only, and it has been impossible, so far, to discover if the groups of lines were ever done in multiples of more than four.

During work on Tell Judaidah in the plain of



EXAMPLES OF POT-PAINTING WITH MULTIPLE BRUSH, FROM TELL JUDAIDAH IN NORTH SYRIA;
OF THE FOURTH MILLENNIUM B.C.

Antioch, in North Syria, the Syrian Expedition of the Oriental Institute was able to establish a ceramic chronology extending well back into Chalcolithic times. On the painted pottery of Judaidah XII, a period which covered essentially the latter half of the 4th millennium, we found a technique of applying paint in groups of wavy bands much like that used on the Decorated Predynastic Egyptian pots. On the Judaidah XII wares, however, the groups of lines were predominantly in fives or multiples thereof, although a few examples with less than five, and some with more than five, were noticed. Being convinced that it would be impossible for a potter, however apt, to manage more than four brushes in his hand at one time, I made a brush with five units (fig. 8) as an experiment. Reference to the patterns in figure 7 show the results achieved with it.

The most characteristic result of the use of such a multiple brush is that all the units act in phase. In the execution of wavy lines, the second

pattern in Figure 7 shows how by twisting the axis of the brushes away from the vertical, the crests of the waves do not line up vertically. The patterns shown are only a few of an infinite variety which could be achieved with the device. It should also be noted that considerable irregularity is possible, depending, for example, on how the handle is held, on the length of the bristles of the brushes, and on how nearly equal is the distance between each brush. If, however, we assume that the primitive potter might have had the patience to draw all of his wavy lines so carefully that groups would be in perfect phase, it would still be possible to determine in some cases if the multiple brush was used, by a concentration of new paint along a straight line or radius within a group. Even if the potter did take the trouble to do all of his waves or other patterns in phase, it is impossible to conceive that his paint would always run out of a single brush at exactly the same point.

Once conscious of the multiple-brush technique, I began noticing more or less certain examples of it in the painted pottery of the 4th millennium, from almost any site which produced such pottery, from Iran to Egypt. After this original over-enthusiasm had settled down, it became apparent that the use of a multiple brush, rather than individual brushes held between the fingers, would be very difficult to prove for the Decorated pottery of Predynastic Egypt, unless one could see a great number of actual examples of pots and sherds. In the collection of about a dozen Decorated pots in the Oriental Institute museum, it was impossible to discover groups of wavy lines with multiples of more than two in perfect phase (see figs. 5 and 6), an effect easily achieved by the method Petrie suggests. On the Iranian and north Mesopotamian pottery, there was a tendency to use the wavy or zigzag groups of lines only over short spaces, and it has been impossible so far to discover a case of the concentration of new paint within a wavy group all along one line or radius. Two examples of sherds from Iran are shown, however (figs. 3 and 4), from the survey collection made by Sir Aurel Stein (*Iraq*, vol. III, pl. xix, 15, and pl. xxii, 55). The zigzags in the centre of fig. 3 work so closely in phase that some kind of a mechanical device seems indicated; the same

seems to hold for the sherd in fig. 4, with some irregularity, and it would be interesting to examine the actual piece to see if the concentrations of new paint all came in one line. Concerning the pottery of Judaidah XII, and wares of similar type in North Syria, there can be no doubt that some form of multiple brush was used. In fig. 1, both the tendency for five waves to stay in phase, and the sharp vertical line of the concentration of new paint is visible. In fig. 2, a repetition of a single 'check-mark' motif, as shown in fig. 7, is used.

For the Tell Judaidah chronology and my original remarks on the multiple brush, see *A.J.A.*, vol. XLI (1937), pp. 10 and 11. Recently Prof. Garstang has reported the multiple brush technique from Cilicia, cf. *Liv. A.A.A.*, vol. XXV (1938), p. 85, on a ware which he takes to be roughly contemporaneous to those of Judaidah XII.

This note intends to do little more than to call attention to the certain use of the multiple brush in north Syria in the fourth millennium, and to suggest to other scholars and museums, with large collections of contemporary painted pottery, that such a technique might be found in their own examples. If such be the case, we would have another peculiar but common trait in proof of the case of diffusion in the Predynastic Near East.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

188 Ancient Mexico. A brief illustrated account of Archaeological Sites visited during the XXVIII Congress of Americanists. By H. J. Braunholtz, M.A., 14th November, 1939, cf. *MAN*, 1939, 174.

189 The Khingan Tungus (Numinchen). Summary of the description of a film shown by E. J. Lindgren, M.A., Ph.D., 14th November, 1939. 'Khingian Tungus' is the term adopted by S. M. Shirokogoroff for a tribe of Northern Tungus living along the Great Khingan Range in North Manchuria. Their culture resembles that of the Kumarchen, Birarchen, Ganchen, and 'Mergen Tungus,' and the exact interrelationships and boundaries of these groups are far from clear. The Khingan Tungus south of the Chinese Eastern Railway on the Imin and Chol Rivers, were visited by the author in 1931 and 1932; they numbered about 30 families, representing perhaps a sixth of the whole tribe. Although most of them came to this area at least a generation ago, they still call themselves *Numinchen*, after the Numin River, to the north, from which they came.

Tents consisting of a conical framework covered by reed matting are used in summer, but mud huts

built by Chinese have been adopted as winter dwellings. Their summer clothes are a modified form of Chinese dress, resembling the Mongol, but native clothing of tanned skins prevails in winter. The Khingan Tungus have dogs, horses with which they nomadize, and, in the case of the wealthier, cattle, and very occasionally sheep and goats. They support themselves chiefly, however, by hunting, which supplies meat for food, skins for clothing, saddle-bags, and household articles, and furs for trade, through which cotton and silk goods, firearms, and ammunition, millet, tea, tobacco, opium, and other products are obtained. Their traditional religion, shamanism, has hitherto held its own against Buddhist influences in surrounding areas.

The horse-stealing activities for which the Khingan Tungus are famed have recently been intensified because of the high cost of opium, which has supplanted alcohol since 1915, and saps the vitality of the tribe. In 1932 some Transbaikalian Buriat immigrants, enraged at their losses, attacked the Imin River group of Khingan Tungus in force, and are said to have left none alive.

Aspects of summer and winter life were illustrated by a film (taken by Mr. O. Mamen), which includes views of neighbouring Olet and Solon settlements.

Huxley Memorial Lecture: Charity and the Struggle for Existence. *Abstract of the Lecture delivered by Dr. R. R. Marett, D.Sc., Hon. D. Litt. (Oxon.), LL.D. (St. Andrews), F.B.A., Rector of Exeter College, Oxford, 28th November, 1939.*

Thomas Huxley in his famous Romanes lecture startled the University of Oxford by saying, or seeming to say, that cosmic process as represented by the struggle for existence "works, not for righteousness, but against it." Here he was referring, no doubt, to the use of tooth and claw as contrasted with more civilized methods of maintaining the race in being. Unfortunately he did not explain what precise function was to be attributed to the higher morality as a means of survival. In fact there and then it sounded—*teste* one who was present—as if natural law and ethical principle had nothing in common.

As a tribute to the memory of that great man, it may therefore be worth while to seek his real meaning, if only along the following line of thought. It is safe to assume that the leading virtues of mankind have a long anthropological—not to say, biological—history, and one that takes us back past man's present position of dominance, with its temporarily greater margin of security, to less favourable conditions, when human beings competed with the rest of creation on far more equal and exacting terms. So, too, we may postulate that what we know in their developed form as virtues are genetically related to very primitive emotional reactions, themselves originating in more or less unconscious dispositions.

Let charity, together with justice and another virtue that may be roughly identified with holiness, be considered from this point of view. There is reason to connect this triad with certain tendencies inherent in human nature in virtue of its bisexual

constitution; of which motherhood, fatherhood, and the effort to transcend the psychological opposition between them are so many manifestations. Charity would seem to be rooted in mother-love, on which the protracted infancy of our species makes it specially dependent; for they both involve a like readiness to give, regardless of desert, and with no thought of a return. Justice, on the other hand, may be conceived as the outcome of male masterfulness, which in course of time establishes a system of rights and duties having strict reciprocity as its ideal limit. Father-right, however, has prevailed over mother-right in the evolution of the greater society, so that modern civilization is threatened with a type of authoritarian state given over to a harsh legalism insufficiently tempered by mercy. That so one-sided an exploitation of man's spiritual resources is unhealthy, is possibly illustrated by the fact that the world's successive civilizations, all alike built up on power-politics, have hitherto invariably come to grief. Family life, however, outlasts the decay of nations. Here, then, lies the best hope of striking a balance between gentleness and firmness in human intercourse. As for what has been called holiness, the history of religion shows that there have always been high-minded persons who tended to turn away from sex as too disturbing a factor in the moral life. But to starve by way of sublimating, sex can at best be but an indirect way of promoting the survival of the race. It must be left rather to ordinary men and women to make their characteristic but diverse contributions to a morality which will ever consist in a compromise between discipline and love; for such is the twofold aim of that traditional nurture which has become man's second nature, and alone can bring him safely through the ages that lie ahead.

REVIEWS.

GENERAL.

The Social Function of Science. By J. D. Bernal, F.R.S. London: Routledge, 1938. 482 pp. Price 12s. 6d.

While anthropology is not explicitly considered among the branches of science studied in this book, anthropologists should read and digest it for two reasons. Firstly they are—or claim to be—scientists and, as such, are interested in the common problems of science with which Bernal deals. Secondly, he treats science anthropologically—as an activity of men integrally related to the societies in which alone men are human. Science actually increases man's control over external nature. It thus fulfils the function claimed by magic in other societies. "But its roots lie rather 'in the practical operation and traditional lore of the craftsman.'" From the latter, modern science differs in having become a conscious and co-operative search, not inspired by an idea of private profit, and not consciously directed in most cases to immediate practical results—actual extensions of human mastery over the environment. And it has become institutionalized, offering to its votaries a livelihood, as much as the service of magic or religion.

Bernal outlines, with masterly brevity, the steps which have raised science to this position—the rise of a literate astronomy and medicine, pursued mainly for magical

ends, under the ancient empires, the exaltation of pure 'theoria' as the highest activity of the spirit among Greek slave-owners, the reunion of theory and practice in the Renaissance, and the adaptation of the resultant discoveries to the needs of the rising capitalist class in the industrial revolution. The organization of science to-day and its position in society are conditioned by these historical events which science itself has helped to shape. But now scientists are becoming conscious of this historico-sociological background, and of the limitations it imposes. Analyzing the situation of modern science with the same objectivity as he would the structure of a crystal, Bernal exposes with full documentation the restrictions and distortions imposed upon research and its application by defective organization, inadequate finance, chaotic publication and the profit-seeking or destructive aims of society itself.

Anthropologists should not be surprised to read that the applications of science are limited rather by the social environment to which they are offered than by the potential and actual knowledge of scientists. In the case of savage and barbarian societies, past and present, this sort of limitation was admirably brought out by Sayce in the discussion of diffusion. Exception might be taken to the use of the term 'profitability' for the

principal limiting factor in our own society. The statement that "people want things all right, only the 'system won't let them earn money to pay for them'" is true only if 'want' be used in the sense of 'wanting the moon.' There is and always has been a very real need for stimulating an effective demand—a need filled, however, irrationally, by advertising to-day. Then further complications intervene; there is no use at the moment in wanting air services between bloated English towns that have spread out five to ten miles around their railway termini.

Social restrictions on its application also affect in a multitude of ways the activities of "pure" science that have no immediate technological implications. Anthropologists should be more prepared than other scientists to accept this extension of the social background of the whole of science. The full realization of the potentialities implicit in the scientific method accordingly requires a reconstruction of society itself. While insisting on this conclusion, however, Bernal does not disdain to offer schemes for enlarging the scope and improving the organization of science, even within the framework of a bourgeois economy. Attention might here be drawn particularly to his exposure of the muddled methods of publication now available. I do not think anthropological and archaeological periodicals are included in the round figure of 33,000 scientific journals Bernal gives. Their inclusion would substantially enlarge it; even the 400 odd periodicals received by the Royal Anthropological Institute represent little more than a third of the polyglot multitude over which the relevant information is dispersed.

Bernal's argument for increased support for science can easily be applied also to anthropology and, on a long view, even to archaeology. His plans for the rational organization of research may evoke the spectre of a caste or priesthood of scientists. A guarantee against that danger is sought in the effective popularization of science. The example of Russia as he—and explicitly anti-Soviet books, too—describe it, shows that this safeguard (at least outside the social sciences) can be made effective.

V. G. C.

A Short History of Culture. By Jack Lindsay.

192 London: Gollancz, 1939. 408 pp. Price 15s.

Mr. Lindsay is seeking, as he tells us in his preface, "the unifying factor, the correlation of all 'kinds of diverse human activities.'" In this stupendous task he originally wrote some 250,000 words, which have had to be cut down by half, with the omission, among other topics, of "attempts to relate the mental and æsthetic constructions of mankind to the formations of matter and energy in crystal, cellulose, electricity, magnetism, etc." The writers whom he describes as the main influences on his thought are Plato, Blake, Nietzsche, Freud, Frazer, Spinoza, Darwin, Marx and Engels. He is also familiar with both diffusionist and evolutionary historians of culture, and draws upon the works of both to support the Marxist interpretation by adducing data unknown to its author.

His own contributions to the synthesis, doubtless owing to the effort of compression which he describes, are a little difficult to follow. He appears to interpret a wide range of cultural phenomena as reflections of patterns inherent in the physical world, though not, it would seem, necessarily visible to the human eye. These patterns are projected by man upon his surroundings, apparently as the result of conscious effort, since the first stage in the process was the "power of mental 'objectification' attained when man began to use tools. The vehicle of projection is the dance. Rhythm is the origin of measurement, spatial as well as temporal. The sense of rhythm, experienced through the heart-beat, is

objectified in the dance, and the dance gives rise both to technique and to science, since "what are the problems of mathematics and physics but questions as to the 'relative spacing and ordering and balancing of material relationships?' It is the same whether we turn to 'wave-mechanics or heredity or metabolism or the 'division of cells.'" The technique of crafts is, however, derived apparently sometimes direct from the "organic 'pattern.'" Thus, in weaving, an organic pattern "of the 'wave-movement weaving up and through the body 'shaken in the crisis of change (especially birth or 'coition')' has 'merged with the social tension, the 'productive need, to produce the craft-design.'" Spinning, on the other hand, is inspired by the dance-spin, for the antiquity of which the late Latin word *circulatrix*, a professional dancing-woman, is quoted as evidence.

Theorists of the ultimate origin of human institutions are on unassailable ground as long as they keep to the period which must always be unknown. However improbable their hypotheses may seem to students of extant primitive societies, no one can prove that the *Urmensch* was not entirely different from anything we know. But Mr. Lindsay, acting on the assumption that cultures can be placed in the evolutionary series according to their material implements, rashly attempts to equate the prehistoric with the contemporary primitive. In his calculations the Baikari of Central Brazil equal the Magdalenians, and the Trobrianders, who have, it is true, been described as in a "stone-age culture," show us the character of Neolithic society. Mr. Lindsay's Golden Age: for "Women's status kept on falling from 'Neolithic times.'" The reader meets with some bewilderment the theory of reciprocity as a sanction for social obligation—put forward explicitly, and with some force, as a challenge to the conception of the communistic savage dominated by the traditions of his tribe—interpreted as giving "a still clearer notion of the communal 'basis of early groups.'" The watchful insistence on individual claims described in *Crime and Custom in Savage Society* appears here as a scrupulously altruistic respect for the interest of the partner. But one's bewilderment increases when a description of a group-life, based on "the methods of reciprocity which we noticed 'in the Trobriand fishers,'" is given, not by reference to Malinowski's exhaustive description of Trobriand institutions, but by a combination of a quotation from Professor Gordon Childe on Neolithic culture with what seem to be conjectures of the writer. In this society, we find, leadership depends on ability in specific tasks, and authority rests with a group of elders who "hold their 'position only in so far as they live up to it."

Mr. Lindsay is in line with modern anthropological thought in holding that magical phenomena can be observed in modern life; he diverges from it, however, in accepting Frazer's intellectualist theory of magic as what he calls "split reasoning" or "distortion," and in holding that this distortion cannot be eliminated until the classless society has been made universal. Myth he appears to regard as a sort of inspired commentary on the development of society, interpreting it in terms which would be outside the conceptual range of the persons among whom the myths were current. Thus in the Judgment of Paris, "the three goddesses, representing sex-love, married life and free virginal intelligence, 'were the forms of choice offered to women as the all-round life of the clan . . . broke up.'"

Mr. Lindsay's use of symbolism sometimes seems like a parody of a certain type of psycho-analysis. The tree is a mother-symbol; hence a totemistic centre of group-life; hence the scene of clan council meetings in early, and unorthodox religious preachings in later, times. Has Mr. Lindsay never had anything to do with an open-air meeting on a hot day? Hence the Tree of

Guernica was "chosen (italics mine) by the Fascists as "an object on which to wreak destructive hatred." More significant still: it was under a tree that Rousseau received his revelation of the doctrine of natural rights, and Rousseau had an extreme mother-fixation.

These instances will perhaps sufficiently indicate the quality of this remarkable book.

L. P. MAIR.

Essays in Anthropology in Honor of Alfred Louis Kroeber. Berkeley, California: (University of California Press), 1936. 422 pp. + bibliography and subject-index of Kroeber's works.

This *Festschrift*, presented to A. L. Kroeber on his sixtieth birthday and edited by Robert Lowie, contains thirty-seven papers, most of them of more than average interest, contributed by writers personally associated with Kroeber and his work. The 'professional appreciation' is written by the editor. Kroeber learnt his anthropology from Franz Boas at Columbia University, and his first piece of field work, among the Arapaho (1902), was done for the American Museum of Natural History. Rivers' *Kinship and Social Organization* (1914) revived his interest in kinship nomenclatures, on which he had published a striking paper in 1907 (*J.R.A.I.* XXXIX, 77), and he took an opportunity of testing current theory on the subject by determining the kinship facts in a typical South-western tribe: the results came out in the memorable *Zuni Kin and Clan* (*A.M.N.H.*: AP. 18: 39, 1917). Since then Kroeber has worked in linguistics, in archaeology, in ethnography and in general culture-history as well as in theory. In linguistics, his tendency has been to substitute larger units for the traditional 'families' recognized in the American field. He has directed excavations in Mexico and Peru. Circumstances have made him an Americanist and the undisputed authority on California, for which, in 1918, his studies finally crystallized (Lowie writes) in the monumental *Handbook of the Indians of California* (*B.A.E.* B78, 1925). Going to California in 1901 to organize an archaeological, linguistic and ethnographical survey of the State, he has been building up from that time forward the Department of Anthropology of the University of California, first for research, but secondarily and subsequently as one of the largest teaching schools of anthropology in the world. The only textbook he has written, *Anthropology* (1923), is unsystematic, and eclectic in its range of topics, but has proved its teaching value.

The other paper contributed by the editor, *Lewis Morgan in Historical Perspective*, is an important re-assessment of Morgan's contribution to science and his influence; his relation to contemporary dogma; his attitude towards evolution and towards diffusion; and his great achievement, the *Systems of Consanguinity and Affinity* (1871). "His was an intellect of unusual honesty, depth and tenacity; and his prolonged concentration achieved the triumph of glimpses of "real insight in a virgin field of scholarship."

Franz Boas himself contributes a short but weighty paper on the relation of social to physical anthropology. The only technological study—and it is a notable one—is Lila M. O'Neale's *Wide-loom Fabrics of the Early Nazca Period*. Miss O'Neale collaborated with A. J. Kroeber in his Cahuachi excavations (1926), which yielded parts of a mantle 5 ft. 5 in. wide, and others almost as large. It is therefore impossible to accept a narrow weaving device as the single prehistoric Peruvian type. "There must have been either an adaptation which allowed several persons to weave simultaneously on the same warp set-up, or a large frame type. So far we have no knowledge of the latter, and it is one of the important problems confronting the textile analyst." Elsie Clews Parsons writes on a subject she has made her own, the vital relation of female house-owning and custody of ceremonies with the matrilineal Pueblo clan. A. V. Kidder, in *Speculations on New World Prehistory*, starting from the question "What were the Americans doing between the appearance of Folsom Man, probably before the dawn of the Old World Neolithic, and (say) the Basketmakers whom tree-ring dating has made A.D.?" opens up some large questions of theory. Another forcible paper on theory and method is *An Anthropological Theory and Archaeological Fact*, by William Duncan Strong, who takes issue with Radcliffe Brown on 'the new anthropology.' But perhaps the outstanding contribution to the volume is made by Carl Sauer in his *American Agricultural Origins*. Combating Spinden's theory of the origin of American agriculture in arid and semi-arid regions where irrigation was required, and reviewing in passing Vavilov's mountain-valley theory and the work of the U.S.S.R. botanists in their New World survey expedition, he advances the thesis that in America and generally the origins of agriculture should be sought in forest lands, and supports his argument with a wealth of acute criticism and sound geographical and climatological analysis. B. A.

ARCHAEOLOGY.

The Old Stone Age in European Russia. By Eugene A. Golomshtok. (*Transactions of the American Philosophical Society*, XXIX, 1938. 191-468 pp.) Price \$5.

Since the Revolution, enormous advances have been made in the study of the Old Stone Age in Russia, practically unknown before 1914. But despite their far-reaching import, the new discoveries are hardly known to western prehistorians, owing to linguistic obstacles and difficulties in obtaining publications. Everyone must be grateful to Dr. Golomshtok for working through the immense but rare Soviet literature and compiling therefrom this detailed and authoritative account, and to the American Philosophical Society for publishing it so lavishly. To most of us it will come as a revelation. Even the illustrations will be exciting; the photographs are better produced than in works published in Russia before 1935, and many line drawings are taken from works already out of print. Let me mention the palaeolithic pit-dwellings of Timonovka in Fig. 84, which give the best idea of this really revolutionary discovery.

Let us hope that the author will have the opportunity to continue his studies and bring them up to date. For the picture presented does not represent the present position of palaeolithic studies in the U.S.S.R., but their position some six years back. Since then Mirchink and Gromov in *Beiträge zur Kenntnis des Quartärs der U.S.S.R.* (1936) have advanced a new pleistocene chronology, equating Moustierian with Russian. Jegorov in *Anthropologische Anzeiger*, 1933, has challenged the pleistocene age of the Podkomok skull, and much new material has been published in the *Transactions of the Second International Conference of the Association for the Study of the Quaternary Period in Europe* (1935) and in *Paleolit S.S.S.R.* (1935)—to mention only what I myself collected in Russia in 1935 and what Hančar quotes in his *Urgeschichte Kaukasiens* (1937). None of this material is utilized in the present work, to say nothing of subsequent publications which I have not seen. At the same time it must be insisted that the present compilation is fuller and more complete than any other available for the period it covers.

Then it is to be hoped that in this very desirable

continuation Dr. Golomshtok will have the benefit of the co-operation of a specialist familiar with the latest developments of palaeolithic terminology in western Europe and Africa. He admits that he is 'an anthropologist of American training with little experience in quaternary archaeology.' In practice he has had to translate the terms used by Russian archaeologists without trying to adjust them to recent changes in West European nomenclature. Indeed, being unfamiliar with the vast periodical literature of Western Europe (Breuil's 1931 article is cited as his 'latest classification'!) he does not always succeed in retranslating correctly names known only from the Russian. So Tayacian appears as Tyasian, and Gudenus masquerades as Hudenus.

Finally may we hope that he and his colleague will be assisted to visit Russia themselves. Owing to dislocation of communications, Russian diagnoses of techniques may diverge from the standards now current in France, England and South Africa. Confusion can be avoided only by a study of the actual implements. In the meantime, however, we shall have to buy this book. The *Transactions* are too long to quote and are out of print, and Hančar's book is in German.

V. GORDON CHILDE.

The Archaeology of Crete: an Introduction. By J. D. S. Pendlebury. London: Methuen, 1939. 195 xxx + 400 pp., pls. 43. Price 30s.

The earliest European civilization worthy of the name arose in Crete; it was discovered by the genial insight of an Englishman; and the most important contributions to archaeological explorations of the island have been made by American and British scholars. But no comprehensive account of the island's pre-history or history has hitherto existed in English. Sir Arthur Evans' monumental work, despite its wide viewpoint and frequent excursions, remains after all, as it is entitled, an account of *The Palace of Minos at Knossos*. Pendlebury's book accordingly fills a very painful gap in archaeological literature. Moreover, it gives a new, because more comprehensive, picture of the Minoan civilization with which 265 out of 365 pages are—quite properly—concerned. This novelty is noticeable even in the chronological framework as set out on p. 301. The classical M.M.II ceramic phase is frankly presented as a purely 'Palace Style,' like L.M.II confined to the Central Cretan palaces. In East Crete the E.M.III traditions lingered on into a phase when M.M.Ia was already established at Knossos, while the local M.M.I survived till M.M.III came in. Even in South Crete allowance is made for some overlapping between local E.M.III and M.M.I and Knossian M.M.Ia and M.M.IIa respectively. This adjustment meets the most plausible argument in Åberg's attack on Evans' chronology—an attack which Pendlebury pertinently criticizes not only with theoretical arguments but also with indications of stratigraphical sequences which the Swedish archaeologist ignored.

The book begins with a brief account of the island's physiography and a long section on routes, followed by an appendix in which ancient authorities are translated and annotated. The remaining chapters are devoted to the Neolithic and Early Minoan, the Middle Minoan, the Late Minoan, and the post-Minoan periods respectively, with an interpellated retrospective survey of the Minoan civilization as a whole. Each chapter is subdivided according to the chronological subdivisions of its period into from two to six sections. In each section the author describes domestic and funerary monuments, pottery, metal-work, stone-work, faience, figurines, etc., and finally foreign relations, and then gives a list of

sites where remains of the period have been found. These sites are represented on a map attached to each section, while the text is illustrated by plans of buildings, schematized versions of the principal ceramic patterns and a few sketches of seals. Photographs of sites, monuments, complete vases, metal tools and frescoes are grouped on plates at the end. The value of the half-tone illustrations has in most cases been reduced—often to absolute worthlessness—by over-crowding and consequent excessive reduction: twenty-five large pots are squeezed on to plate XVIII and an equal number on to one-half of plate XIV! Tinted paper further reduces the effect of these microscopic figures—made in most cases from excellent photographs, as can be seen under a magnifying glass, which, however, also reveals the grain of the screen.

The book will serve as a manual for students as well as a general survey of Crete's past glories. The routes and lists of sites will be a guide to those who can tramp the island to inspect its ancient sites and look for new ones. But the route by which I went to Krasi and back in an afternoon from Candia is not here indicated and the position of the interesting *tholos* is inaccurately stated. The descriptions of ceramic forms and decorations are sufficiently detailed to put the inquirer on the right lines for mastering the intricacies of Minoan chronology and even for classifying sherds. The author's intimate personal knowledge of Egyptian material invests with special weight his remarks on Egyptian connexions and so the absolute dates he gives for the several prehistoric periods. On the highly controversial question of the relations between Crete and the mainland Pendlebury preserves an objective balance. While emphasizing the contrasts between Mycenaean and Minoan he frankly prefers Evans' thesis of a Minoan domination of the mainland in L.H. I-II to the contrary thesis popular in Central Europe and Cambridge. But he states the latter thesis, clearly, if briefly, on p. 229. His long sojourn in the island, his extensive travels there, and his complete familiarity with the site of Knossos, and the vast material stored in the palace magazines (to which Pendlebury has written a very valuable guide) guarantee the authority of his account of Crete itself and allow him to invest that account with such liveliness as makes it readable to those who are not specialists.

V. G. C.

Rock Drawings of Southern Upper Egypt. Sir Robert Mond Desert Expedition. By Hans A. Winkler. Egyptian Exploration Society, Oxford, 1938. 196

The death of Sir Robert Mond has deprived the intellectual world of a great figure. He has left his mark in many spheres of scientific research, but nowhere more so, perhaps, than in archaeological exploration. Here we have the fruits of an expedition sent out by him to examine rock drawings in Upper Egypt, mainly in the desert east of Luxor, in the hilly country of the water-shed between the Nile and the Red Sea. Some are obviously modern, Arab, Greek, etc., but the presence of Nabataean inscriptions so far from home is in itself interesting.

Others are earlier, undatable at present, but obviously prehistoric. The oldest are quite distinctive; animals, hunting scenes, geometric designs, the bow and the dog being depicted. Drawings due to a Hamitic cattle-bringing incursion are later, and still later, this time coming from the east, we have apparently a seafaring people who invaded the mountain area and actually reached the Nile. It was probably through these newcomers that Mesopotamian and possible Indian influences were able to reach Upper Egypt. Later again a tide of human migration from the north seems to have made its way

up the Nile. Characteristic in the pictures of this river-craft-borne folk is the gesture of upraised arms: such a gesture is, however, not unknown in rock drawings of the Sahara. It would seem that after this last culture-phase the climate deteriorated and desert conditions set in. Few pictures of later date occur until the comparatively recent groups mentioned above. Changes in climate in these regions are, of course, well known from the investigations of Miss Caton Thompson to the north and Dr. Leakey to the south, and the various prehistoric cultures to which we must assign these drawings in the eastern desert could hardly have flourished there unless the country was then more fertile, and therefore the rainfall more considerable, than is the case to-day.

Dr. Winkler has confined himself to the study of rock drawings; there has been little opportunity to investi-

gate associated industries. The art of a people is a very important expression of their culture, but comparisons between art groups in different areas, with a view to assigning cultural connexions, is almost as dangerous as purely typological comparisons of stone industries. It is amazing how similar drawings, even conventionalizations, can occur in two art groups which are quite distinct both culturally and in time. It is only when the whole products of a culture, art, industries, etc., are together available for purposes of comparison that there can be any certainty in postulating cultural connexions. It is to be hoped that the death of Sir Robert Mond will not mean that such further investigations will become impossible. Dr. Winkler's book is to be very heartily recommended. The illustrations are beautifully reproduced, and the text is concise. No student of the rock drawings in North Africa can afford to be without it. M. C. BURKITT.

CORRESPONDENCE.

Skins of Rebirth. Cf. MAN, 1939, 91.

SIR,—Professor Canney's article is of great interest. I give a few more examples of the uses of skins.

[Among the Sandawi of Kondoa Irangi — Tanganyika Territory] the corpse of an adult is wrapped in the skin of an ox slaughtered for the purpose, and a child in the skin of a goat."

The next example is connected with the rebirth as it occurs in the greatest of all initiation ceremonies, viz., that of the coronation.

He [the chosen prince] is stripped naked, washed, and girt about the loins with a covering made of the skins of a jerboa, a hare, and a small antelope.(a)

The next examples are from Dr. Warren, *Magician and Leech*. These examples deal with a perpetual rebirth or immortal life. Dr. Warren refers to a Wachagga (Bantu tribe) story from Kiimanjaro, recorded by C. Dundas.

"According to another tradition, the God sent his messenger to inform mankind that they would enjoy a perpetual renewal of youth by casting their skins when old age approached. The God granted this boon on one condition, namely, that no eye should witness this act of sloughing. A certain old man, when his skin was partly cast, allowed himself to be seen by his grand-daughter, and as a result of his disobedience to the divine command, mankind lost for ever the gift of renewed youthfulness."

As it is possible for migrants in Africa to reach every part of it by foot I see (in this sloughing of the skin) the loss of it in the first part of the Egyptian mummification, and the restoration of it by the technique of the embalmers. If any one saw what really happened, the belief in immortality would be shattered. Dr. Warren quotes a similar tradition from R. H. Codrington, *The Melanesians*:—"There is, for instance, a tradition in some of the Melanesian islands, that men lost the power of renewing youth by casting their skins, because on one occasion an old woman, after sloughing, resumed her cast-off skin."

Bamenda, British Cameroons. M. D. W. JEFFREYS.

REFERENCES.

¹ Bagshawe, F., 1. *The People of the Happy Valley*. Part III, page 336. Journal of the African Society, Vol. XXIV, No. XCVI, July 1925.

(a) "Symbolic apparently of the embryonic state. In Egypt the Pharaoh at consecration was wrapped in an animal skin which was called 'the cradle skin.'"

See *E.R.E.*, VII, 318."

² Meek, C. K., 1931. *A Sudanese Kingdom*, page 136. Kegan Paul, London.

³ Warren, W. R., 1929. *Magician and Leech*, page 3. Methuen & Co., London.

⁴ *Ibid.*, page 4.

'Aryan and Mediterranean' Anthropometry.

SIR,—Annoyed by the fact that several Italian anthropologists have differentiated regional types (Venetian, Emilian, Florentine, Cagliaritan, Sicilian) Prof. Carmelo Midulla, writing in the *Riforma medica*, 1939, 55, 16, makes a special plea for the recognition of an Italian 'Aryan and Mediterranean' type, a 'national archetype.' This he claims to have demonstrated first in 1933 by striking an average of the measurements given by other authorities for the Venetian, Emilian, Cagliaritan, and Sicilian types. It is one thing to find by anthropometry that there are different regional types, but it is quite another matter and absolutely unscientific to take the mean of such types to construct a hypothetical national type. Midulla might at least have demonstrated a difference between his 'national archetype' and other Mediterranean races, but he is content to remark that it very closely approximates to the measurements of the statues of Apollo Belvedere and of Antinous in the Vatican Museum, statues which are not even Italian but Greek. He also quotes himself as having said in 1933 that the Italian peninsula showed an ethnological unity in language, costume, and race, than which there can be no statement more absurd. He further claims that there are no regional types, but that the slight variations found in different places are occupational. It is news that the different occupations are geographically segregated in Italy.

Midulla has now examined 800 men, aged 18-26, and 100 women, aged 20, from all parts of Italy. Although he attacks the 'regional' school for measuring mixed age-groups, he himself has committed the error of not waiting for the fullest possible development of height, for growth may continue until 25 years. Without giving his criteria for determining this 'Aryan and Mediterranean' race—Aryan and Mediterranean being two entirely different things—he says that he has investigated the 'Aryan and Mediterranean' ancestry of his subjects as far as their grandparents. By this method, a man with a Jewish greatgrandparent would be included as 'Aryan and Mediterranean.' Further, there is a strong element of selection in his series. The subjects were all of the same social stratum—middle-

class students. This selection immediately excludes that totally different physical type which can be easily recognized by eye: the peasant or artisan of presumably African ancestry—the builder's labourers, the navvies, and tillers of the soil, especially in southern Italy, Sicily, and Sardinia. The 800 were further selected from 5,000 candidates of the same social class, but we are not told the criteria of selection, beyond the fact that those selected had no blemish or disease. This surely does not mean that 4,200 were so affected; therefore 'selection' needs more explanation. In view of these facts it is not surprising that the average height of Midulla's 'national archetype' is 5 ft. 6 in.; but it is surprising to be told that this is the average height of an Italian.

Midulla next divided his subjects according to whether they came from northern, central, or southern Italy, and he worked out the average for these regions. His results, he claims, contradict the conclusions of the 'regional' school, although he is compelled to confess that these three regions provide different average measurements; but he claims that these differences are merely of size, not of type.

It only remains to be said that the measurements of the small series of 100 women examined corresponded very closely to those of the Venus in the Lateran Museum, the Venus of Cyrene in the National Museum at Rome, and the Venus Anadyomene in the Vatican museum. Was this an instance of subconscious selection? In any case, the average Italian must be as much a myth as the average Englishman.

CANNING SUFFERN.

Blood Groups of the Nayadis of Malabar, South India.

199 SIR.—The Nayadis are a very small community of about 500 professional beggars found in the southern taluks of Malabar District and the northern taluks of Cochin State. For their social and physical anthropology, see Aiyappan, *Madras Government Museum Bulletin* 2, 4 (1937). They are regarded as the lowest among the Hindu castes of the Malabar coast, and according to local caste regulations, they are believed to pollute Brahmans and other upper castes from distances ranging from about a hundred to thirty feet. The Nayadis have a definite, though low, place in caste organization, unlike the jungle tribes (pre-Dravidians) who are by no means definitely included in it. The racial relationship between the lowest caste of the plains on the one hand, and the jungle tribes in the vicinity, on the other, is of considerable interest to students of Indian Anthropology.

Fifty Nayadis belonging to about twelve families were tested for their blood groups at the Olavakkot Nayadi Settlement where the Government of Madras is maintaining a school and a model farm, as part of their reclamation work for this very backward people. Tubes of standard sera for testing were obtained from the Haffkine Institute at Bombay on the recommendation of Professor Ruggles Gates. Of the individuals typed 28 per cent. were found to belong to O group, and 72 per cent. to B, groups A and AB being completely absent. The typing was done with great care, each citrated sample being tested twice. The remaining sera were tested by the clinical pathologist in the General Hospital, Madras, and found to be still potent. The presence of a very high percentage of B among the Nayadis indicates that they are serologically more akin to the higher castes of the plains than to the pre-Dravidians such as the Paniyans Aiyappan (MAN, 1936, 255), who are high in A. While anthropometry does not demonstrate this fact in any clear manner, the physiognomy of the Nayadis (Ruggles Gates, MAN,

1935, 36) supports the evidence of blood grouping, which is also in accordance with tradition.

A fuller discussion of the significance of the distribution of blood groups among the Nayadis will be published elsewhere.

A. AIYAPPAN.

Government Museum, Madras.

The Meaning of the Cowrie-Shell. Cf. MAN, 1939, 165.

200 SIR.—The Cowrie shells are found among Anglo-Saxon remains in East Yorkshire. A particularly large example now in the Hull Museum was found in the centre of a long necklace containing over eighty amber and other beads with a skeleton of a female at Staxton, near Scarborough; it has been identified as *Cypraea vinosa* Gmel., which is restricted to the Red Sea. This suggests an interesting problem of transport in Anglo-Saxon times.

Dr. J. W. Jackson of the Manchester Museum (*Journal of Conchology*, xx, 2, August, 1934), describes a similar shell found in a Saxon grave at Camerton in Somerset. The grave is dated to the middle of the seventh century A.D., and contained a female skeleton, with the minute bones of a seven-months' child within the pelvis. Various small objects were found, including a cowrie shell. Dr. Jackson also gives instances of this same species in Saxon graves in Kent, Bedfordshire, Sussex and Cambridge. He has also recorded the species from Canton de Samer, Tardingen, and from excavations at Pompeii. In his book on "Shells as Evidence of the Migration of Early Culture" (Manchester, 1917), he discussed the "significance of the presence of cowries in graves and other situations," stating that the cowrie was (and still is) widely believed to confer fertility on women and to help in the process of parturition. Cowries are worn by women as amulets, presented to them in many places as bridal offerings, and used by sterile and pregnant women to attain the respective benefits.

In addition they have been placed in graves with the object of conferring vitalizing power and to ensure the continuance of the deceased's existence, i.e., not merely life but resurrection. The association of cowrie-shells with pregnancy is found as far away as India and Japan.

The late J. R. Mortimer records a necklace of 219 various beads found at Driffield in which were five cowrie shells (*Cypraea europaea*) each about $\frac{1}{4}$ inch long, but these shells are found on the Yorkshire coast to-day.

Hull Municipal Museums.

T. SHEPPARD.

Kernos and Lanx Satura. Cf. MAN, 1939, 129.

201 SIR.—In MAN, 1939, 129, Dr. Jeffreys ingeniously compares certain African sacrificial vessels with the Greek *kernos* and suggests that the name of the Graal may denote something similar, derived from a Latin term for a like implement. What he says about the *kernos* is correct as far as it goes, but it was not confined to the Eleusinian mysteries, nor is it a Greek invention, but much older, see M. P. Nilsson, *Minoan-Mycenaean Religion*, p. 387 sq. But as to the Latin equivalent, the nearest analogy known to me was called *lanx satura*, which certainly throws no light on the word Graal. See the grammarian Diomedes (in Keil, *Grammatici Latini*, Vol. I, p. 485, 36), who says that a miscellaneous composition is called *satura* (i.e., satire) "from a dish (*lanx*) which was filled with many and various first-fruits and offered by the ancients in their liturgy to the gods." Whether it had compartments to separate one kind of offering, liquid or solid, from another, or not, he does not say, being interested in the word *satura* itself and not in the religious rite.

St. Andrews.

H. J. ROSE.



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